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Determinants of Deposit-Insurance Adoption and Design*

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Abstract: This paper seeks to identify factors that influence decisions about a country's financial safety net, using a new dataset on 170 countries covering the 1960-2003 period. Specifically, we focus on how outside influences, economic development, crisis pressures, and political institutions affect deposit-insurance adoption and design. Controlling for the influence of economic characteristics and events such as macroeconomic shocks, occurrence and severity of crises, and institutional development, we find that pressure to emulate developed-country regulatory frameworks and power-sharing political institutions dispose a country toward adopting design features that inadequately control risk-shifting.

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Introduction

Every country offers implicit deposit insurance, no matter how vigorously they may deny it. This is because whenever a large or widespread banking insolvency occurs, pressure for governmental relief of at least some bank stakeholders becomes politically too intense to resist, even if no explicit deposit insurance system is in place. Adopting a system of explicit deposit insurance does not eliminate implicit guarantees but simply supplements them with a system of guarantees that contractually link the capitalization of a country's private banks to the credit and tax-collecting capacity of their chartering government.

When we code a map of the world as in Figure 1 for the year 2003, we see that most countries have no explicit deposit-insurance scheme (EDIS). However, the 1990s saw a rapid spread of EDIS in the developing world. In January 1995 only 49 countries had an EDIS. However, by year-end 2003, this number had surged to 87 countries, an increase of almost 80 percent. Although a significant share of the surge can be attributed to transition countries of Eastern Europe that were "encouraged" to adopt deposit insurance by the EU Directive on Deposit Insurance, recent adopters can be found in all continents of the world.

This paper views the crafting of a country's financial safety net as an exercise in incomplete contracting in which the counterparties are major sectors of a nation's economy. Including an EDIS in the net allocates to each sector a mix of contingent subsidies and burdens. Our statistical analysis seeks to determine what factors influence safety-net design, focusing on a country's decision to adopt an EDIS and whether these same factors affect risk-shifting controls. Our study examines data for 170 countries over 1960-2003 after constructing a new dataset on deposit insurance design for countries around the world. Our goal is to identify and interpret how outside influences interact with domestic institutional and political factors, both in adopting

deposit insurance and in crafting the character and cost-effectiveness of the particular scheme a country adopts.

Our interest in these questions stems from a suspicion that the spread of explicit deposit insurance schemes across countries generates a presumption that, even when poorly designed, an EDIS embodies a standard of best practice that is worth copying. We hypothesize that, in some countries, the restraining influence of internal economic and political determinants may be undermined by domestic or foreign pressure to "emulate" developed-country safety-net arrangements without adequately tailoring the design features to differences in their public and private contracting environments. To test this hypothesis, we estimate models of deposit-insurance adoption and design that enter proxies for outside pressure alongside a battery of domestic determinants of regulatory decisions. Starting in the 1990s, IMF crisis-management advice recommended erecting an EDIS as a way either of containing crises or of formally winding down crisis-generated blanket guarantees (Folkerts-Landau and Lindgren, 1998; Garcia, 1999). This leads us to test the complementary hypothesis that outside international pressure—i.e., an emulation effect—might adversely influence design decisions in countries that experience a systemic crisis.

A particular focus of this paper is to explore how cross-country differences in political systems affect decisions to adopt and design an EDIS. The presence of an EDIS and how well it is designed affects many constituencies, especially banks, depositors, creditors, specialized bureaucracies, and taxpayers. Because individual constituencies have conflicting interests, the political process governing adoption and design decisions can be complex.

Economists presume that political dealmaking serves both public and private interests. Public-interest rationales for deposit insurance focus on protecting small, uninformed depositors and assuring the stability of the banking system (Diamond and Dybvig, 1983). Purely private-

interest theories portray the public interest as an amusing fiction. Between these extremes, theories of incentive-conflicted intervention conceive of regulatory decisions as the outcome of interest-group competition, in which well-organized or powerful groups compete with voters to pressure public-spirited, but opportunistic politicians and regulators for regulatory interventions that authorize sponsoring groups to capture rents from other sectors (Stigler, 1971, Peltzman, 1976, Becker, 1983).[1]

Deposit insurance benefits risky banks if they can opportunistically exploit loopholes in the risk-control features to extract net subsidies from taxpayers and safer banks, which provide implicit risk capital by accepting responsibility for helping to recapitalize the system if it should become deeply insolvent. In the United States, lobbying for deposit insurance with slack risk-control features has been characterized as rent-seeking behavior (Kroszner, 1998). For example, Calomiris and White (1994) argue that federal deposit insurance benefited predominantly smaller and poorly diversified unit banks and that, had not the Great Depression reduced confidence in the banking system as a whole, their pleas for federal insurance could not have overcome the opposition of politically stronger large banks. Kane and Wilson (1998) show that, in the face of the Great Depression, large banks' wish list changed and that large-bank share prices benefited greatly from introducing deposit insurance precisely because depositors had lost confidence in banks of all sizes.

Especially in the financial-services industry, political competition is strong. For this reason, it is natural to suppose that differences in political systems would influence safety-net design. Financial institutions regularly lobby for "reforms" that promise to increase their franchise value (Kroszner and Stratmann, 1998). When a country's political system is more democratic, the voices of special interests can more easily be heard. This leads us to hypothesize

[1] Kroszner and Strahan (2001) offer a fuller discussion of competing political-economy views of deposit insurance.

that political power sharing makes EDIS adoption and subsidy-generating design features more likely.

In testing this hypothesis, candidate economic control variables include macroeconomic conditions and variation in the ownership structure of the banking system (as proxied by state-owned banks' market share). To establish the robustness of our results, we experiment with different statistical methods and alternative indices of economic, political, and cultural influences.

A long literature analyzes the benefits and costs of explicit deposit insurance and explores theoretically the challenges of designing an optimal deposit-insurance system.[2] More recently, a complementary body of empirical research has emerged. Using a cross-country dataset, Demirgüç-Kunt and Detragiache (2002) and Demirgüç-Kunt and Huizinga (2004) study how EDIS design features affect banking-system fragility and market discipline. In poor institutional settings, generous design features tends to destabilize the banking system and to undermine market discipline. Demirgüç-Kunt and Kane, 2002), Hovakimian, Kane and Laeven (2003) and Laeven (2002) show that weak institutional environments undermine deposit-insurance design. Cull, Senbet and Sorge (2004) produce evidence that, in weak institutional environments, an EDIS retards financial development rather than fosters it. Looking only at crisis countries, Honohan and Klingebiel (2003) and Kane and Klingebiel (2004) show that blanket deposit-insurance guarantees – when adopted as a crisis-management strategy – increase the fiscal cost of resolving distress without reducing either the cumulative output loss or the duration of the crisis.

[2] See for example, Diamond and Dybvig (1983), Chari and Jagannathan (1988), Kane (1995), Calomiris (1996), Bhattacharya et al. (1998), and Allen and Gale (1998).

Laeven (2004) studies how political processes influence coverage levels across countries. We extend his analysis by simultaneously modelling the adoption decision and several other design features. In the process, we compile a panel data set of evolving design features. The novelty of our paper lies in: (i) using a simultaneous-equation model to generate cross-country evidence on the determinants of EDIS adoption and design; and (ii) updating and extending the deposit-insurance dataset developed in earlier studies and tracking changes in EDIS design across time in each country.

High-income, institutionally more advanced countries and those that experience a financial crisis are also more likely to adopt an EDIS. Outside influences prove especially important in the adoption decision, particularly during crisis periods. Even when we control for income and institutional quality, external pressures and internal politics play significant roles. Countries with more-democratic political systems prove more likely to adopt an EDIS and to incorporate inadequate risk controls, all the more so if adoption occurs during or in the wake of a crisis. Finally, the more surprising our model estimates the adoption decision to be, the more likely that the scheme chosen incorporates design features that subsidize risk-taking.

The rest of the paper is organized as follows. Section 2 reviews the dataset and the sources used to construct it. It also presents summary statistics for all included variables. Section 3 explores single-equation models of the adoption decision. Section 4 incorporates a baseline adoption equation into simultaneous models of safety-net design. Section 5 summarizes our findings and explains their policy implications.

2. Data

Our goal is to investigate the extent to which regression methods can explain whether and when a country installs a system of explicit deposit insurance and, if so, how well that system is

designed. To this end, we construct a unique dataset covering all countries that have adopted explicit deposit insurance through yearend 2003, relying on official country sources and information provided by World Bank country specialists. We also carried out a survey of deposit insurance agencies or related institutions to complement available data on coverage levels. Appendix 2 provides a more detailed list of the sources of the deposit insurance data we have collected.

Our set extends the Demirgüç-Kunt and Sobaci (2001) database in two ways: first, we update the endpoint to 2003 to include data on recent adopters; second, we create a time-series dataset of individual-country design features. We compile data on coverage, not only for the year 2000 (as in Demirgüç-Kunt and Sobaci, 2001) but for every year in which an EDIS existed. For example, coverage levels in the United States have been revised five times: from US$ 5,000 at adoption in 1934, to US$ 10,000 in 1950, to US$ 15,000 in 1966, to US$ 20,000 in 1969, to $40,000 in 1974, and to US$ 100,000 since 1980.

Table 1 partitions 181 sample countries for which we have per-capita income data into four income groups and shows that the propensity to adopt an EDIS rises with income. Table 2 lists adopting countries and the year their EDIS was installed.

Table 3 lists the design features our dataset covers and the country characteristics our regression experiments employ. The unit of observation is a country-year. The table presents summary statistics for all variables. For each variable, detailed definitions and sources are provided in Appendix 1.

In studying deposit-insurance adoption and design, the number of country-years to be sampled is an element of research strategy. One natural starting point is 1934, when the U.S. Federal Deposit Insurance Corporation opened its doors. If we begin in 1934, the maximum sample size is 181 x 40 = 7,240. Later starting dates are more attractive because we want to

examine whether and how the occurrence of a financial crisis might influence deposit-insurance adoption and design. As it happens, a World Bank cross-country dataset on crises compiled by Caprio et al. (2005) begins in 1970, although it is thought to be more reliable after 1975. If we begin in 1975, the maximum sample size is 181 x 29 = 5,249. For the adoption models we fit, coefficient estimates prove much the same whether we start the clock at 1934, 1970, or even 1980. Of course, because observations are missing for some explanatory variables in many countries, the number of usable observations is much less than these maximum values. The usable sample increases markedly when we restrict the determinants of EDIS adoption and design to measures of inflation, per capita GDP and GDP growth.

The first column of the first panel of Table 3 lists a series of endogenous deposit-insurance design features. The mean value of the EDIS indicator variable, *Deposit insurance,* states the proportion of country-years in which the countries in our sample included explicit deposit guarantees in their safety net. This turns out to be 17 percent, since many countries adopted EDIS relatively recently. The mean value of indicator variables for specific design characteristics tells us what proportion of *installed schemes* incorporates each particular characteristic. All variables are coded so that higher values indicate an increased exposure to risk shifting. Higher values indicate that, according to the empirical literature, moral hazard is less effectively controlled by that particular design feature. Indicator variables take the value one: if the administration is publicly managed (*Administration*), if membership is voluntary (*Membership*), if foreign currency deposits and interbank deposits are covered (*Foreign currency deposits* and *Interbank deposits*), if there is no coinsurance (*Coinsurance*), if a permanent fund exists (*Permanent fund*), and if funding comes from only public sources (*Funding*). The last two endogenous variables are: (1) the EDIS coverage ratio (*Coverage ratio*), which we define as the ratio of the maximum insured value of individual account balances to per-capita GDP; and (2) a

proposed overall "moral hazard index" (*Moral hazard*), which we represent by the first principal component of the variance-covariance matrix for the coverage ratio and indicator variables for the six other features.

We represent outside influences in several different ways. *External Pressure* is a dummy variable that takes the value one for the years 1999 on. In 1999, the IMF published a best-practice paper on deposit insurance and its design, recommending explicit deposit insurance for developing countries. The World Bank also recommended explicit deposit insurance for specific developing countries during the sample period. *World Bank Loan* is an indicator variable that moves from zero to one for individual countries starting in the year the World Bank began an adjustment lending program that entailed EDIS installation. European Union directives also encouraged deposit-insurance adoption. To capture this effect, we deploy two indicators: *EU Directive* and *EU Candidacy*. In 1994, the EU's directive encouraging countries to adopt deposit insurance came into force. For EU member countries, *EU Directive* is set to one from 1994 on, but is zero otherwise. Since the directive was aimed at candidate countries, *EU candidacy* takes the value of one from 1994 on for EU candidate countries only and is zero otherwise. Finally, we introduce a variable, *Emulation*, which is the interpretive name we assign to the nonlinear trend that tracks the proportion of countries having EDIS systems at each point in time. As more and more countries adopt an EDIS, Emulation increases in value. We interpret this ratio as a proxy for the extent to which deposit insurance is believed to be a universal best practice. Reported regressions feature *External Pressure* as the main measure of outside influence, but in most models the World Bank and EU dummies work at least equally well.

We also investigate whether and how the occurrence and fiscal cost of a financial crisis might affect the timing and character of deposit-insurance decisions. *Crisis dummy* moves from zero to one for countries that are experiencing a crisis in a given year. *Post-crisis adoption*

variable is an indicator variable that identifies countries that adopted EDIS up to three years after a crisis. *Fiscal cost/GDP* expresses the fiscal cost of resolving a banking crisis as a percentage of GDP. This variable lets us explore how crisis severity might influence safety-net decisions.

To characterize the political environment of a country, we focus on *Executive constraints*. This index measures the extent to which institutionalized constraints on the decision-making powers of the country's chief executive create other "accountability groups." The index ranges from 1 to 7. Higher values indicate increased restriction on executive authority. Because other researchers have used *Polity score*, *Political competition*, and *Democratic accountability*, we experiment with these alternative indicators as well. *Polity score* ranges from –10 to 10, with negative scores assigned to countries that are autocracies and positive values to democracies. *Political competition* ranges from 1 to 10, with higher scores representing increased political competition. Finally, *Democratic accountability* measures how responsive the government is to its people and whether changes occur peacefully or violently. It ranges from 0 to 6, with values increasing with the extent of democracy.

To control for differences in the economic environment, we include the following macroeconomic variables: *Real interest rate*, *Inflation*, *GDP growth*, *Terms of trade change*, and *Credit growth*. Movement in these variables captures the extent of internal and external macroeconomic shocks the countries experience. *Real interest rate* and *Inflation* are defined as the annual rates of real interest and inflation, respectively. *GDP growth* is the growth rate in real GDP and *Credit growth* is the growth rate in the amount of real credit extended to the private sector by financial intermediaries. *Terms-of-trade change* states the annual percentage change in terms of trade.

To explore whether cross-country variation in direct government control of the banking system matters, we include a government-ownership ratio. *Government ownership* states the

percentage size of government's ownership stake in the banking system. The importance of banks in the economy is represented by *Bank Deposits/GDP*, which expresses total deposits in banks as a share of GDP. When bank deposits represent a larger share of GDP, banks might have more clout and be better able to lobby for deposit-insurance subsidies.

As measures of institutional development, we use *GDP per capita*, and indices for *Bureaucracy*, *Corruption*, and *Law and Order*. *Bureaucracy* ranges from 0 to 4, increasing in the strength and quality of the bureaucracy. *Corruption* measures how well bribery is controlled in the country. It ranges from 0 to 6, with low scores indicating high levels of corruption. *Law and Order* expresses the quality of country's legal system and rule of law. It ranges from 0 to 6, where high scores indicate a high level of law and order.

Table 4 reports the correlation matrix of deposit-insurance variables and country characteristics across the years and countries for which data are available for both members of each pair of variables**.** The presence of explicit deposit insurance is positively associated with economic development (as measured by GDP per capita), external-pressure indicators, crisis experience, and constraints on executive authority. For countries with explicit insurance, we find that coverage levels and exposures to moral hazard are higher when per capita GDP and constraints on executive authority are low, and during periods of increased external pressure. Coverage levels prove higher in countries where government ownership of banks is more extensive. Because we expect the same variables to influence adoption and design, design decisions must be modelled simultaneously with adoption. Because it ignores potential selection bias, Table 4 probably overstates the bivariate correlation of deposit-insurance characteristics with country variables. To avoid selection bias, regressions seeking to explain design decisions are estimated simultaneously with an EDIS adoption equation whose relatively parsimonious

specification is based on evidence generated by first fitting alternative single-equation models of the adoption decision.

3. Empirical Results of the Adoption Decision

A. Logit Models of the Adoption Decision

Tables 5 through 9 report on stepwise regression experiments aimed at developing a benchmark model of the adoption decision. The first-cut model appears in the first column of Table 5. It relates the indicator variable, *Deposit insurance,* to six macroeconomic variables: *Real interest rate*, *Inflation*, *GDP growth*, *Credit growth*, *Terms of trade*, and *GDP per capita*. This experiment establishes the baseline extent to which macroeconomic variables alone can explain the presence or absence of explicit deposit guarantees. Consistent with our preliminary analysis, *GDP per capita* shows the strongest influence. The second column shows that, except for *GDP per capita* and *Inflation*, the estimated influence of macroeconomic forces becomes negligible when year dummies are introduced. This experiment also confirms that individual-country adoption decisions are significantly influenced by the spread of these schemes across countries.

The third column steps in the *External Pressure* indicator. This variable proxies encouragement from international entities to install explicit insurance. As expected, *External Pressure* earns a significant and positive coefficient. The probability of adopting an EDIS increases after the IMF endorsed such schemes as best practice.

The other seven experiments in Table 5 make use of our preferred political variable, *Executive constraints*. The results indicate that political systems that more strongly constrain their executive are more likely to adopt an EDIS. Regression 5 includes *Executive constraints* with *External Pressure* and shows that both are significant. Columns 6 and 7 show that

coefficient values and significance patterns found for the *GDP per capita*, *External Pressure* and *Executive constraints* are virtually unaffected by moving the starting date of the study forward either to 1970 or to 1980.

Column 8 drops three consistently insignificant macro variables whose spotty availability constrains the usable size of our sample. This relatively parsimonious model also serves as the "benchmark" model for subsequent regression experiments. This experiment indicates that inflation loses significance in the enlarged sample, while the coefficients of *GDP per capita*, *External Pressure*, and *Executive constraints* remain much the same and model performance is enhanced.

The logit models estimated in columns 1 through 8 assume that a country makes each year a decision about changing its deposit-insurance status.[3] However, once explicit insurance is in place, countries rarely jettison it. In column 9, we investigate—by dropping all post-adoption observations—how much including the period after the adoption decision biases estimates. Coefficients of interest remain significant, but their magnitude declines.

To communicate the economic significance of these findings and to sharpen their interpretation, it is helpful to calculate the marginal influence each regressor has on the probability of adoption. Using the mean of each explanatory variable in regression 8, Column 10 reports each variable's marginal effect (and standard error). For example, GDP per capita is expressed in thousands of U.S. dollars. Its coefficient in column 10 implies that, on average, a US$ 1000 increase in GDP per capita brings about a 0.01 increase in adoption probability. It is particularly instructive to calculate the marginal effect of a one-standard-deviation increase in each regressor. A one-standard-deviation increase in GDP per capita (or US$ 8660) is associated with a 0.08 increase in the probability of deposit-insurance adoption; a one-standard-deviation

increase in emulation (or 0.32) is associated with a 0.09 increase in the probability of deposit-insurance adoption; and a one-standard-deviation increase in executive constraints (2.34) is associated with a 0.10 increase in the probability of deposit-insurance adoption. Relative to the 0.22 mean value the deposit-insurance variable in the column-10 sample, these incremental effects are substantial. This exercise shows that one standard-deviation increases in *GDP per capita*, *Executive Constraints*, and *Emulation* have similar impacts on adoption probability.

Table 6 introduces alternative proxies for external pressure. Panel A shows that whatever measure we use—*World Bank Loan, EU Directive/Candidacy, Emulation*—outside forces significantly influence adoption decisions. Indeed, the last column shows that, when entered together, IMF, *World Bank*, and *EU Directive* influences are each significant.[4] Panel B replicates these results, controlling for a linear time trend. Even in the presence of this uninterpreted trend, pressure from the three multinational organizations significantly influences adoption decisions. In specifications that include the trend, *World Bank Loan* and *EU Directive* remain significant at conventional levels, while *External Pressure* and *Emulation* prove marginally significant at ten percent.

Table 7 investigates whether and how financial-crisis experience, bank ownership, institutional quality, and bank dependence affect the adoption decision. The experiment depicted in the first column supports the hypothesis that countries that experience a crisis are more likely to adopt an EDIS. The second column confirms the hypothesis that an EDIS is likely to be adopted as a way of *unwinding* a crisis, while the third column shows that the odds of adoption increase with the fiscal burden the particular crisis poses.[5]

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[3] However, we do allow for correlation among errors for each country by estimating Logit using clustered errors at the country level.

[4] Because Emulation and External Pressure are very highly correlated at 80 percent, we exclude Emulation from Column 8.

[5] Demirgüç-Kunt and Detragiache (2002) show that bank crisis probabilities increase with the adoption and generous design of an EDIS. Their results are robust to: (i) restricting the sample to countries that only adopted

Columns 4 and 5 of Table 7 explore whether EDIS adoption and government ownership are substitute ways of protecting depositors. The datasets used to generate the ownership data cover a much smaller number of countries. *Privatization*, but not *Government Ownership* is significant; including these variables reduces the coefficient assigned to per-capita GDP. Although *Government ownership* is itself a trend variable in many countries,[6] the size and significance of the *External Pressure* coefficient prove greater in this specification than in the benchmark model.

Columns 5 to 7 of Table 7 further explore the impact of institutional quality. By institutional quality, we mean contractual enhancements generated by the institutional environment in which banks and customers contract. Our benchmark specifications begin with *GDP per capita*, which is a widely recognized correlate of institutional quality. We insert *Bureaucracy*, *Corruption*, and *Law and Order* into the model to investigate whether variation in these indices affects the adoption decision. We find weak evidence that more-corrupt countries are more likely to adopt deposit insurance, but none of the other institutional variables enters significantly. *External Pressure* and *Executive constraints* remain positive and significant even after controlling for institutional quality.

Finally, column 8 controls for the importance of banks in the economy by introducing *Bank deposit/GDP*. One might suppose that, when banks play a more important role, risky banks more effectively might promote their interests. This hypothesis is rejected. The relevant coefficient is insignificant and its inclusion does not affect the significance levels of other regressors.

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deposit insurance previous to crises and excluding crisis periods, and (ii) estimating a two-equation model where the emulation variable serves as the instrument for the first-stage adoption model. Thus, while EDIS is more likely to be adopted as a result of crises, adoption directly increases fragility.

[6] In 1970, 29 countries out of 92 (31.5%) had more than 90% government ownership of banks. In 1995, 11 countries out of 92 (12.0%) had more than 90% government ownership of banks. In 1970, only one country (India)

Table 8 introduces alternative proxies for political power-sharing. Columns 2 and 3 replace *Executive constraints* with two alternative measures: *Polity score* and *Political competition*. Both variables come out of the University of Maryland's INSCR Program. The INSCR program covers more countries than the third index featured in the Table, which comes from the International Country Risk Guide (ICRG) database. Both INSCR variables show a similar effect: Countries with effective systems of political checks and balances are more likely to adopt an EDIS than countries in which political power is more concentrated. Each variable shows a positive and significant impact on the adoption decision. Introducing either one of them reduces the *GDP per capita* coefficient by about a standard error, but has a negligible effect on the coefficient of *External Pressure*. The last column introduces the ICRG's measure of *Democratic accountability*. This measure also enters significantly and reduces the *external pressure* and *per capita GDP* coefficients more than the INSCR indices.

Table 9 uses the baseline model to investigate how much the impact of *External Pressure* and *Executive constraints* varies across regions and country types. The first three columns investigate whether the European Union requirement that member countries adopt an EDIS might be responsible for the significance of *External Pressure*, *Executive constraints*, and *GDP per capita*. Although the coefficients of *GDP per capita* and *External Pressure* decline when EU countries are excised from the sample, their effects remain sizeable and significant. *Executive Constraints* shows a slightly larger effect in this sample. Columns 4 to 6 show that deleting very small countries (where intersectoral conflict may be easier to resolve) from the sample increases the coefficients of these three variables. Finally, the last three columns establish that introducing a fixed effect for each continent virtually halves the effect of variation

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of the 29 countries with more than 90% government ownership of banks had an explicit deposit insurance system in place. In 1995, two of the 11 countries with more than 90% government ownership of banks had an EDIS.

in *GDP per capita*, intensifies the effect of *External Pressure*, and lessens the effect of *Executive constraints*.

These regression experiments strongly support a role for *External Pressure* and *Executive constraints* in EDIS adoption decisions. This finding is robust to numerous changes in specification, such as introducing proxies for crisis pressures, macro shocks, institutional quality, population size, and regional differences in culture. *GDP per capita*— a frequently used proxy for economic and institutional development— remains significant in alternative specifications and does not eliminate the significance of *External Pressure* and *Executive constraints*. The next section demonstrates that these conclusions are robust to the use of an alternative statistical method.

B. Hazard Models of the Adoption Decision

Another way to analyze the timing of adoption decisions would be to regress the duration of a country's stay in the non-EDIS state (state N) against subsets of the determinants we used in the logit models. The difficulty with this approach is that countries that are in state N at yearend 2003 would give incomplete (i.e., downward-biased or right-censored) data on the length of their stay.

Hazard models surmount this problem by focusing instead on the transitional probability of staying in state N for a spell of exactly t years, where results for t>43 can be extrapolated from the transitions observed. The hazard rate $\lambda(t)$ may be interpreted as the probability of country's leaving state N in year t, given that it was in state N when the year began. The logit models estimated in the previous section imply that this probability λ is a function of country characteristics as well as time.

As a robustness test, Table 10 fits a series of hazard-rate models that let us examine how different factors affect a country's probability of transitioning to an EDIS. The first three columns of the table estimate each of three widely used hazard models, using only the benchmark macro determinants identified in Table 5. The Cox procedure models the hazard rate as:

$$\lambda^{i}(t) = \lambda(t) \exp(\beta' x_i), \quad (1)$$

where x is any specified vector of potential explanatory variables. The exponential procedure imposes on (1) the restriction that $\lambda(t) = \lambda$. Finally, the Weibull model specifies that $\lambda(t)$ in (1) evolves as:

$$\lambda(t) = \lambda\alpha t^{\alpha-1}. \quad (2)$$

The evolutionary parameter α determines whether the hazard rate is increasing ($\alpha > 1$), decreasing ($\alpha < 1$), or constant ($\alpha = 1$) over time. High and significant values of α (which emerge in all of our Weibull specifications) denote positive duration dependence and can be interpreted as evidence of external influence or emulation. Because our dataset reduces to a cross section of durations when employing duration-model techniques, we compare alternative specifications of the hazard model (focusing specifically on the values of α) to investigate the presence of external influence rather than estimating a time trend or including *Emulation* as an explanatory variable.

Because explanatory variables enter exponentially, the coefficients reported in Table 10 are the logarithms of the underlying relative hazard coefficients. The relative hazard coefficients can be calculated as the antilog of the reported coefficients. The exponent of each coefficient estimate shows the proportional increase in the hazard rate that occurs when the focal explanatory variable increases by one unit. Regression 3 may serve as an example.

GDP per capita is denominated in thousands of U.S. dollars. The results show that: If *GDP per capita* increases by one unit (i.e., by one-thousand dollars), then the hazard rate for adopting deposit insurance increases by exp(0.069) = 1.071 fold (or an increase of about 7 percent). This tells us that countries with higher *GDP per capita* are more likely to adopt sooner. On the other hand, countries with higher *Inflation* or more-rapid *GDP growth* are likely to delay deposit-insurance adoption, although these restraining effects are not statistically significant.

In regression 3, the estimated value of α is 4.49 (positive and significant). This tells us that the hazard function for adopting deposit insurance is increasing rapidly over our sample period 1934 – 2003. To see just how quickly, we can compare the hazard rates for the years 1980 and 2003. Focusing on the estimate of α in column 3, we find that for a typical country:

$$\frac{\lambda(Year\ 2000) = \lambda(66) = \lambda\alpha(\lambda 66)^{\alpha-1}}{\lambda(Year\ 1980) = \lambda(46) = \lambda\alpha(\lambda 46)^{\alpha-1}} = (66/46)^{\alpha-1} = (66/46)^{4.49-1} = 3.53.$$

This tells us that such a country is 3½ times more likely to adopt deposit insurance in 2000 than in 1980. This nonlinear trend approximates the *Emulation* effect that we estimate in our Logit specifications.

The first three columns of Table 9 indicate that all three procedures for estimating the hazard rate assign similar roles to the benchmarked macro variables, but only *GDP per capita* shows a significant effect. The fourth column confirms that only the one macro variable is significant.

Columns five through eight use the Cox or Weibull procedure and expand the set of variables to include measures of government power-sharing and crisis experience. The significant positive values of α in the Weibull models support our contention that external influence is important: the likelihood of adoption (the "transforming event") at time t, conditional upon duration up to time t, increases over time. Among the external influence

variables, *World Bank Loan*, *EU Directive* and *EU Candidacy* are still significant and positive confirming earlier results. *External Pressure* loses significance but as in the case of *Emulation*, its impact is actually captured by the evolutionary trend α.

The significance of the *Crisis dummy* confirms the hypothesis that EDIS is more likely to be adopted during crisis. Finally, the significantly positive sign captured by the government power-sharing variable *Executive constraints* and the fact that its inclusion reduces the impact of *GDP per capita* indicate that social capital plays an important role in adoption decisions: democratic countries are more likely to adopt an EDIS, confirming again our initial findings. The results are similar when using the Cox model rather than the Weibull procedure, except that the Cox model excludes the possibility of time variation in the hazard rate.

Table 11 reports out-of-sample predictions of the year of adoption for countries that had no deposit insurance by yearend 2002 – the end of our sample period. These estimates are based on the Weibull duration model in column 9, Table 10. We also report estimates of the number of years until each country without an EDIS can be expected to adopt deposit insurance given year 2002 circumstances. For a large number of countries, particularly poor countries in Africa, the model predicts adoption not until more than a decade from now. For example, for Zimbabwe the model predicts adoption in the year 2021. (In reality, Zimbabwe adopted deposit insurance "prematurely" in the year 2003). Based on our model, one would have expected several other countries to already have adopted deposit insurance (for example, rich countries like Australia and New Zealand, but also China). A fairer interpretation is to say that surprising nonadopting countries must have seriously debated adoption for many years and rejected it for substitute arrangements that, in their particular environments, promised to resolve intersectoral conflict in a more satisfactory way.

4. Explaining Deposit-Insurance Design

A credible EDIS builds and maintains depositor confidence even in dangerously fragile and broken banks. For this reason, the fairness and efficiency of a country's safety-net design may be measured by the extent to which design features promise to preserve the system's financial integrity without either subsidizing or penalizing bank risk-taking. Theories of interest-group interaction suggest that, in almost every country, society may count on bank clout and lobbying activity to curtail unfair and inefficient restrictions on bank risk-taking. However, these same theories suggest that, in many environments, weak and risky banks can use their clout to persuade authorities to subsidize risk (Laeven, 2004.)

In Table 12, controlling for macro shocks, crisis experience, and institutional development, we investigate how outside pressure and the political system influence the generosity of system design. By the "generosity" of a design feature, we mean the extent to which empirical evidence summarized in Demirgüç-Kunt and Kane (2002) indicates that its presence or size promotes bank risk-taking (i.e., moral hazard). We investigate decisions about the coverage ratio separately because: (i) coverage limits are particularly important in controlling moral hazard, and (ii) compared to other design features, time-series data on coverage are of better quality. However, to recognize that the particular combination of features chosen might mute or reinforce the impact of some of the others, we introduce a variable we call *Moral Hazard*, defined as the first principal component of the covariance matrix of the eight individual features listed in section 2. We also explore an alternative *Moral Hazard without coverage* variable that focuses on design features excluding coverage. In constructing the covariance matrix, all design features are standardized to have a mean of zero and a standard deviation of one.

We estimate decisions about features in a two-stage Heckman selection framework. The first stage is an EDIS selection model, using regressors that represent forces whose significance was established in Sections II and III. We report Heckman's two-step estimates.[7] Although not constrained to be the same across features, first-stage coefficients are virtually identical in all columns. Second-stage regressions incorporate a regressor (an inverse measure of adoption probability called the Heckman Lambda) that accounts for the sample-selection bias that would emerge if a single-equation estimator were used and also measures how "surprising" it would be for each country to adopt or not adopt an EDIS. This regressor proves positive and significant for all specifications, confirming that the latent characteristics that make adoption surprising also encourage generosity in design. Wherever they are significant, the second-stage coefficients for determinants of particular features always show the same sign.

The first three specifications in Table 12 explain (the logarithm of) coverage ratios, while the last two model the moral-hazard composites. These regressions show that that *External Pressure* is a significant determinant of EDIS adoption and the two moral-hazard composites. *External Pressure* does not have a significant impact on the coverage ratio.

Executive Constraints exerts a positive influence on the moral-hazard composites, although this effect is marginally significant (at the 10% level). This means that countries with more-democratic political systems prove not only more likely to adopt an EDIS, but also more likely to install design features that entail substantial moral hazard. Again, the effect on coverage ratios is not significant.

Crises dispose a country to design a more generous EDIS. This is indicated by the positive and significant coefficients the *Crisis dummy* receives in both stages. These results

[7] We obtain qualitatively similar results when using maximum likelihood to estimate the Heckman selection model.

provide further evidence that systems adopted in crises tend to be poorly designed (Hovakimian, Kane, and Laeven 2003).

Among the strictly economic variables, we find that *GDP per capita* increases the probability of adoption, but – except through its incorporation in Heckman's Lambda – has no significant impact on design. Interestingly, *Inflation* proves significant in both stages, and it is the only determinant that seems both to restrain adoption and to promote better design.

Table 13 reports predicted coverage ratios for nonadopting countries at yearend 2002. These predictions come from the Heckman two-step model in column 1 of Table 12. The predicted coverage ratios for this subset of countries ranges from 0.41 for Angola to 1.33 for China, well below the world average of actual coverage ratios of existing deposit insurance schemes, which stood at 2.45 at yearend 2002. This predicted reluctance to provide generous coverage supports the hypothesis that banks in nonadopting countries find it hard to negotiate with other sectors a contract that would prove more advantageous to them than the implicit system that the nonadopting country has in place.

5. Summary and Implications

Because banks play a key role in pricing and constraining risk-taking in other sectors, a well-regulated banking sector may be characterized as a cornerstone of a well-functioning national economy. Regulatory systems are asked to establish and enforce efficient standards for bank behavior. Deposit insurance is an important and potentially constructive element of a country's financial safety net.

To study the spread of explicit deposit insurance systems and determinants of decisions about adoption and design during recent decades, this paper uses data on 170 countries. We confirm that richer and more institutionally developed countries prove more likely to adopt

explicit deposit insurance, but also find that such countries also better manage the design features. Among the controls, only inflation plays a restraining role.

Analysis focuses on how outside influences and internal political factors feed into the intersectoral contracting process. Our results indicate that democratic political processes and external pressure to emulate developed-country regulatory frameworks promote adoption and dispose a country toward generous design. Adoption proves more likely during or after a crisis, presumably because representatives for sectoral interests find it easier to negotiate regulatory reform during distressed times. Unhappily, crisis pressures are likely to result in design features that inadequately control moral hazard. Robustness tests show that these findings are insensitive to the use of different statistical methods, different control variables, and differences in sample coverage.

Overall, the policy lesson is not that deposit insurance is to be avoided, but that it has many substitutes and takes many forms. Democratic systems—which allow sectoral interests to negotiate more openly with one another----prove more likely to adopt deposit insurance and (at least initially) to design it poorly. *Ceteris paribus*, systems installed in crisis circumstances and in response to external pressures to emulate other countries are especially apt to be poorly designed. Econometrically, recognizing that deposit-insurance selection and design decisions are simultaneously determined implies that cross-country studies seeking to determine how the presence or absence of an EDIS affects the performance of a country's financial sector and national economy ought to imbed their performance-assessment equation in a larger multiple-equation system of safety-net design.

References

Allen, Franklin, and Douglas Gale. 1998. "Optimal Banking Crises" *Journal of Finance* 53 (4), 1245-1284.

Barro, Robert J., and David B. Gordon. 1983. "A Positive Theory of Monetary Policy in a Natural Rate Model." *Journal of Political Economy* 91, 589-610.

Barth, James R., Gerard Caprio, and Ross Levine. 2001. "The Regulation and Supervision of Banks around the World: A New Database," Policy Research Working Paper, No. 2588, Washington, DC: World Bank.

Barth, James R., Gerard Caprio, and Ross Levine. 2004. "Bank Regulation and Supervision: What Works Best?" *Journal of Financial Intermediation*, forthcoming.

Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer, and Patrick Walsh. 2001. "New Tools in Comparative Political Economy: The Database of Political Institutions." *World Bank Economic Review* 15, 165-176.

Becker, Garry S. 1983. "A Theory of Competition among Pressure Groups for Political Influence." *Quarterly Journal of Economics* 98, 371-400.

Bhattacharya, Sudipto, Arnoud W.A. Boot, and Anjan V. Thakor. 1998."The Economics of Bank Regulation" *Journal of Money, Credit and Banking* 30 (4), 745-770.

Calomiris, Charles, 1996. "Building an incentive-compatible safety net: special problems for developing countries. Mimeo, Columbia University.

Calomiris, Charles, and Eugene White. 1994. "The Origins of Federal Deposit Insurance," In: Claudia Goldin and Gary Libecap, eds., *The Regulated Economy: A Historical Approach to Political Economy*. Chicago: University of Chicago Press, pp. 145-188.

Caprio, Gerard, Daniela Klingebiel, Luc Laeven, and Guillermo Noguera. 2005. "Banking Crisis Database." In: Patrick Honohan and Luc Laeven (Eds.), *Systemic Financial Crises: Containment and Resolution*. New York: Cambridge University Press, pp. 307-340.

Chari, Varadarajan V., and Ravi Jagannathan. 1988. Banking Panics, Information, and Rational Expectations Equilibrium, *Journal of Finance* 43, 749-761.

Cull, Robert, Lemma Senbet and Marco Sorge, 2004, "Deposit Insurance and Financial Development," *Journal of Money, Credit and Banking*, forthcoming.

Demirgüç-Kunt, Asli, and Enrica Detragiache. 2002. "Does Deposit Insurance Increase Banking System Stability? An Empirical Investigation." *Journal of Monetary Economics* 49, 1373-1406.

Demirgüç-Kunt, Asli and Harry Huizinga. 2004. "Market Discipline and Deposit Insurance." *Journal of Monetary Economics* 51, 375-399.

Demirgüç-Kunt, Asli, and Edward Kane. 2002. "Deposit Insurance Around the World: Where Does it Work?" *Journal of Economic Perspectives* 16, 175-195.

Demirgüç-Kunt, Asli, and Tolga Sobaci. 2001. "A New Development Database. Deposit Insurance around the World." *World Bank Economic Review* 15, 481-490.

Diamond, Douglas, and Philip Dybvig. 1983. "Bank Runs, Deposit Insurance and Liquidity." *Journal of Political Economy* 91, 401-419.

Economides, Nicholas, R. Glenn Hubbard, and Darius Palia. 1996. "The Political Economy of Branching Restrictions and Deposit Insurance." *Journal of Law and Economics* 29, 667-704.

European Commission. 1994. *Directive 94/19/EC of the European Parliament and of the Council of 30 May 1994 on deposit-guarantee schemes*, O.J., L135, pp.5-14.

Folkerts-Landau, David, and Carl-Johan Lindgren. 1998. "Toward a Framework for Financial Stability." Mimeo. International Monetary Fund, Washington, DC.

Garcia, Gillian G. 1999. "Deposit Insurance: Actual and Best Practices." IMF Working Paper 99/54, Washington, DC: International Monetary Fund.

Garcia, Gillian G. 2000. "Deposit Insurance: Actual and Good Practices." Occasional Paper No. 197, Washington, DC: International Monetary Fund.

Giammarino, Ronald, Eduardo Schwartz, and Josef Zechner. 1989. "Market Valuation of Banks Assets and Deposit Insurance in Canada." *Canadian Journal of Economics* 22, 109-127.

Grossman, Gene, and Elhanan Helpman. 2001. *Special Interest Politics*. Cambridge MA: MIT Press.

Honohan, Patrick and Daniela Klingebiel. 2003. "The Fiscal Cost Implications of an Accommodating Approach to Banking Crises." *Journal of Banking and Finance* 27 (8), 1539–1560.

Honohan, Patrick, and Luc Laeven. 2005. *Systemic Financial Crises: Containment and Resolution*. Cambridge: Cambridge University Press, forthcoming.

Hovakimian, Armen, Edward Kane, and Luc Laeven. 2003. "How Country and Safety-Net Characteristics Affect Bank Risk-Shifting." *Journal of Financial Services Research* 23, 177-204.

International Association of Deposit Insurers. 2003. International Deposit Insurance Survey. http://www.iadi.org/html/App/SiteContent/Complete%20Surveys/

International Monetary Fund. 1999. *Report on the Observance of Standards and Codes: Bulgaria*. Section VI. System of Deposit Insurance. Washington, DC: International Monetary Fund. http://www.imf.org/external/np/rosc/bgr/depos.htm

Joskow, Paul L., and Roger G. Noll. 1981. "Regulation in Theory and Practice: An Overview." In: G. Fromm, ed., *Studies in Public Regulation*. Cambridge: MIT Press, pp. 1-65.

Kane, Edward J. 1995. "Three Paradigms for the Role of Capitalization Requirements in Insured Financial Institutions." *Journal of Banking and Finance*, 19:3-4, pp. 431-59.

Kane, Edward J. 1996. "De Jure Interstate Banking: Why Only Now?" *Journal of Money, Credit, and Banking* 28, 141-161.

Kane, Edward J., and Berry K. Wilson. 1998. "A Contracting-Theory Interpretation of the Origins of Federal Deposit Insurance." *Journal of Money, Credit, and Banking* 30, 573-595.

Kane, Edward J., and Daniela Klingebiel, 2004. "Alternatives to Blanket Guarantees for Containing a Systemic Crisis," *Journal of Financial Stability*, 1, 31-63.

Kroszner, Randall S. 1998. "The Political Economy of Banking and Financial Regulatory Reform in Emerging Markets." *Research in Financial Services* 10, 33-51.

Kroszner, Randall S., and Philip Strahan. 1999. "What Drives Deregulation? Economics and Politics of the Relaxation of Bank Branching Restrictions." *Quarterly Journal of Economics* 114, 1437-1467.

Kroszner, Randall S., and Philip Strahan. 2001. "Obstacles to Optimal Policy: The Interplay of Politics and Economics in Shaping Bank Supervision and Regulation Reforms." In: Frederick S. Mishkin, ed., *Prudential Supervision: What Works and What Doesn't*. Chicago: University of Chicago Press, pp. 233-273.

Kroszner, Randall S., and Thomass Stratmann. 1998. "Interest Group Competition and the Organization of Congress: Theory and Evidence from Financial Services' Political Action Committees." *American Economic Review* 88, 1163-1187.

Krueger, Anne O. 1974. "The Political Economy of the Rent-Seeking Society." *American Economic Review* 64, 291-303.

Kyei, Alexander. 1995. "Deposit Protection Arrangements: A Comparative Study," IMF Working Paper 95/134, Washington, DC: International Monetary Fund.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny. 1999. "The Quality of Government." *Journal of Law, Economics and Organization* 15, 222-279.

La Porta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2002. "Government Ownership of Banks." *Journal of Finance* 57, 265-301.

Laeven, Luc. 2002. "Bank Risk and Deposit Insurance." *World Bank Economic Review* 16, 109-137.

Laeven, Luc. 2004. "The Political Economy of Deposit Insurance". *Journal of Financial Services Research* 26(3), 201-224.

Merton, Robert. 1977. "An Analytical Derivation of the Cost of Deposit Insurance and Loan Guarantees." *Journal of Banking and Finance* 1, 3-11.

North, Douglass C. 1990. "A Transactions Cost Theory of Politics." *Journal of Theoretical Politics* 2, 355-367.

Pagano, Marco, and Paolo Volpin. 2001. "The Political Economy of Finance." *Oxford Review of Economic Policy* 17, 502-519.

Pagano, Marco, and Paolo Volpin. 2004. "The Political Economy of Corporate Governance." *American Economic Review*, Forthcoming.

Peltzman, Sam. 1976. "Toward a More General Theory of Regulation." *Journal of Law and Economics* 19, 109-148.

Persson, Torsten, and Guido Tabellini. 2000. *Political Economics - Explaining Economic Policy*. Cambridge: MIT Press.

Poole, Keith T., and Howard Rosenthal. 1997. *Congress: A Political-Economic History of Roll Call Voting*. Oxford: Oxford University Press.

Ronn, Ehud I., and Avinash K. Verma. 1986. "Pricing Risk-Adjusted Deposit Insurance: An Option-Based Model." *Journal of Finance* 41, 871-895.

Stigler, George. J. 1971. "The Theory of Economic Regulation." *Bell Journal of Economics and Management Science* 2, 3-21.

Talley, Samuel H., and Ignacio Mas. 1990. "Deposit Insurance in Developing Countries," Policy Research Working Paper, No. 548, Washington, DC: World Bank.

Tornell, Aaron, Frank Westermann, and Lorenza Martinez. 2004. "The Positive Link Between Financial Liberalization Growth and Crises." NBER Working Paper 10293.

White, Eugene. 1981. "State-Sponsored Insurance of Bank Deposits in the United States 1907-1929." *Journal of Economic History* 41, 537-557.

White, Eugene. 1998. "The Legacy of Deposit Insurance: The Growth, Spread and Cost of Insuring Financial Intermediaries." In: Michael Bordo, Claudia Goldin, and Eugene White, eds., *The Defining Moment: The Great Depression and the American Economy in the Twentieth Century*. Chicago: Chicago University Press.

World Bank. 2004. "Deposit Insurance – Reforms Supported by the World Bank during the Period 1993-2004." Mimeo. Operations Evaluation Department, World Bank.

Figure 1: Explicit and Implicit Deposit Insurance Around the World (Data as of end-2003)

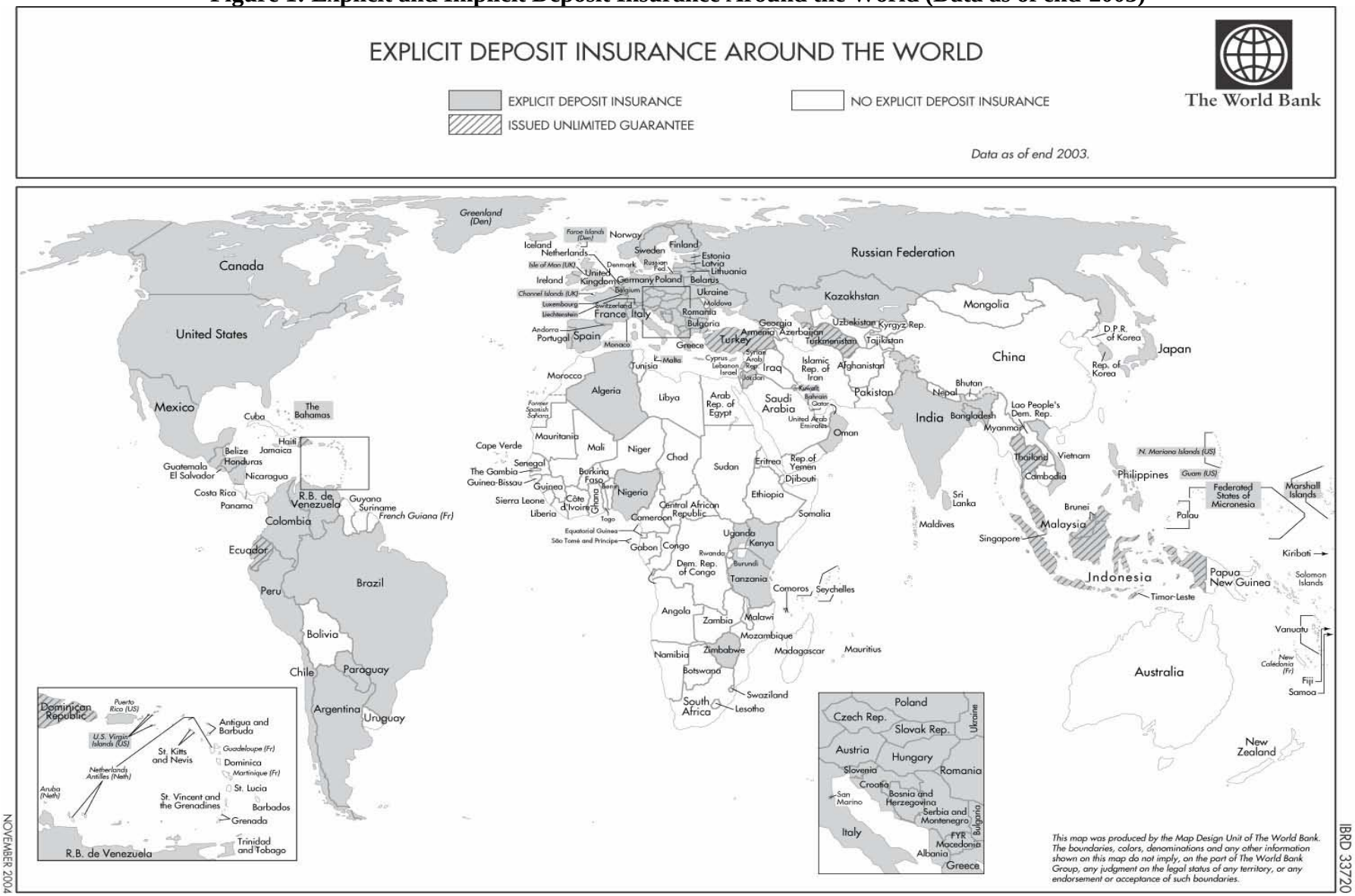

Table 1. Distribution of Countries with and without explicit deposit insurance by income quartile at yearend 2003

This table tallies countries with and without explicit deposit insurance at yearend 2003. The data are compiled by the authors. We refer to the data section of this paper for details about the data sources and variable definitions. The total number of countries included is 181. Blanket guarantees are coded as explicit deposit insurance.

Income group	Number of countries	Number of countries with explicit deposit insurance	Number of countries with merely implicit deposit insurance
High income	41	32 (78.05%)	9 (21.95%)
Upper middle income	28	16 (57.14%)	12 (42.86%)
Lower middle income	51	29 (56.86%)	22 (43.14%)
Low income	61	10 (16.39%)	51 (83.61%)
Total	181	87 (48.07%)	94 (51.93%)

Table 2. Explicit deposit insurance systems at yearend 2003

This table lists the countries that adopted explicit deposit insurance systems by yearend 2003. The data are compiled by the authors. We refer to the data section of this paper for details about the data sources and variable definitions. GDP and bank deposits per capita are from International Financial Statistics (IFS). The following "non-adopting" countries are included in our sample: Afghanistan, Angola, Armenia, Australia, Azerbaijan, Barbados, Belize, Benin, Bhutan, Bolivia[e], Botswana, Brunei, Burkina Faso, Burundi, Cambodia, Cameroon[g], Cape Verde, Central African Republic[g], Chad[g], China, Comoro Islands, Costa Rica, Cote d'Ivoire, Cuba, Djibouti, Egypt, Equatorial Guinea[g], Eritrea, Ethiopia, Fiji, Gabon[g], Gambia, Georgia, Ghana, Grenada, Guinea, Guinea-Bissau, Guyana, Haiti, Hong Kong (China), Iran, Iraq, Israel, Kiribati, Kyrgyz Republic, Laos, Lesotho, Liberia, Libya, Madagascar, Malawi, Maldives, Mali, Mauritania, Mauritius, Moldova[d], Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nepal, New Zealand, Niger, Pakistan, Panama, Papua New Guinea, Qatar, Republic of Congo[g], Rwanda, Saudi Arabia, Senegal, Seychelles, Sierra Leone, Singapore, Solomon Islands, Somalia, South Africa, St. Lucia, Sudan, Suriname, Swaziland, Syria, Tajikistan, Togo, Tunisia, United Arab Emirates, Uruguay[f], Uzbekistan, Vanuatu, W. Samoa, Yemen, Zaire, Zambia. The total number of countries covered is 181.

Country	Date enacted	Unlimited guarantee (1=Yes; 0=No)	Coverage limit in 2003 (in US$)	GDP per capita in 2003 (in 1999 US$)	Coverage limit-to-GDP per capita in 2002	Coverage ratio adjusted for coinsurance in 2002	Maximum Coinsurance (in %) in 2002	Coverage limit-to-deposits per capita in 2002
Albania	2002	0	6,568	914	3.3	3.0	15[h]	n.a.
Algeria	1997	0	8,263	1,592	4.2	4.2	0	n.a.
Argentina	1979	0	10,327	8,076	3.6	3.6	0	16.0
Austria	1979	0	25,260	32,049	0.8	0.7	10	0.9
Bahamas	1999	0	50,000	13,485	n.a.	n.a.	0	4.4
Bahrain	1993	0	39,894	10,593	3.5	3.5	0	4.4
Bangladesh	1984	0	1,021	358	5.0	5.0	0	14.6
Belarus	1996	0	1,000	1,347	0.8	0.7	20[i]	5.8
Belgium	1974	0	25,260	29,889	0.8	0.7	10	0.9
Bosnia-Herzegovina	1998	0	3,228	1,551	1.8	1.8	0	n.a.
Brazil	1995	0	6,925	4,486	2.6	2.6	0	8.9
Bulgaria	1995	0	9,686	1,453	2.4	2.4	0	8.5
Canada	1967	0	46,425	22,174	1.7	1.7	0	2.6
Chile	1986	0	3,764	5,146	0.8	0.7	10[i]	2.1
Colombia	1985	0	7,192	2,268	4.3	3.2	25	18.0
Croatia	1997	0	16,343	4,943	2.5	2.5	0	4.1
Cyprus	2000	0	25,260	13,467	2.5	2.2	10	2.0
Czech Rep.	1994	0	31,575	5,207	3.6	3.2	10	5.3
Denmark[c]	1988	0	40,296	37,500	1.2	1.2	0	2.5
Dominican Republic	1962	1	Full	1,946	n.a.	n.a.	0	n.a.
Ecuador	1999	1	Full	1,660	n.a.	n.a.	0	n.a.

Country	Date enacted	Unlimited guarantee (1=Yes; 0=No)	Coverage limit in 2003 (in US$)	GDP per capita in 2003 (in 1999 US$)	Coverage limit-to-GDP per capita in 2002	Coverage ratio adjusted for coinsurance in 2002	Maximum Coinsurance (in %) in 2002	Coverage limit-to-deposits per capita in 2002
El Salvador	1999	0	4,720	1,756	3.1	3.1	0	63.3
Estonia	1998	0	8,058	4,148	0.5	0.4	10	1.4
Finland	1969	0	31,863	30,332	0.9	0.9	0	1.9
France	1980	0	88,410	29,133	2.7	2.7	0	4.2
Germany	1966	0	25,260	31,773	0.8	0.7	10	0.8
Gibraltar	1998	0	25,260	n.a.	n.a.	n.a.	0	n.a.
Greece	1993	0	25,260	12,652	1.5	1.5	0	1.7
Guatemala	1999	0	2,487	1,549	1.3	1.3	0	6.3
Honduras	1999	0	9,297	695	n.a.	n.a.	0	n.a.
Hungary	1993	0	14,429	5,136	0.6	0.6	0	1.5
Iceland	1985	0	29,455	29,984	0.7	0.7	0	1.5
India	1961	0	2,193	453	4.2	4.2	0	8.1
Indonesia	1998	1	Full	980	n.a.	n.a.	0	n.a.
Ireland	1989	0	25,260	25,497	0.6	0.5	10	0.8
Isle of Man	1991	0	35,694	n.a.	n.a.	n.a.	25	n.a.
Italy	1987	0	130,457	20,302	4.8	4.8	0	8.7
Jamaica	1998	0	4,957	2,149	2.1	2.1	0	4.9
Japan	1971	0	93,371	43,818	2.5	2.5	0	2.1
Jordan	2000	0	14,104	1,591	7.8	7.8	0	8.0
Kazakstan	1999	0	2,774	1,342	0.8	0.8	0	5.3
Kenya	1985	0	1,313	337	3.2	3.2	0	9.5
Korea	1996	0	41,925	12,174	4.0	4.0	0	4.8
Kuwait	1982	0	Full	13,792	n.a.	n.a.	0	n.a.
Latvia	1998	0	5,545	2,476	1.4	1.4	0	5.2
Lebanon	1967	0	3,317	2,929	0.9	0.9	0	0.4
Liechtenstein	1992	0	25,260	n.a.	n.a.	n.a.	0	n.a.
Lithuania	1996	0	16,293	2,215	3.1	2.8	10[k]	14.1
Luxembourg	1989	0	25,260	53,013	0.4	0.4	10	0.1
Macedonia	1996	0	25,260	2,441	10.3	9.2	10[l]	46.0
Malaysia	1998	1	Full	4,541	n.a.	n.a.	0	n.a.
Malta	2003	0	25,260	9,812	n.a.	n.a.	n.a.	n.a.

Country	Date enacted	Unlimited guarantee (1=Yes; 0=No)	Coverage limit in 2003 (in US$)	GDP per capita in 2003 (in 1999 US$)	Coverage limit-to-GDP per capita in 2002	Coverage ratio adjusted for coinsurance in 2002	Maximum Coinsurance (in %) in 2002	Coverage limit-to-deposits per capita in 2002
Marshall Islands	1975	0	100,000	1,593	50.3	50.3	0	n.a.
Mexico	1986	0	2,871,337	3,621	n.a.[a]	n.a.[a]	0	n.a.[a]
Micronesia	1963	0	100,000	1,674	52.7	52.7	0	121.2
Netherlands	1979	0	25,260	30,389	0.7	0.7	0	0.7
Nicaragua	2001	0	20,000	n.a.	27.4	27.4	0	74.9
Nigeria	1988	0	366	250	1.3	1.3	0	5.7
Norway	1961[b]	0	299,401	37,369	6.0	6.0	0	11.3
Oman	1995	0	52,016	5,766	6.5	4.9	25[m]	20.6
Paraguay	2003	0	10,500	1,820	n.a.	n.a.	0	n.a.
Peru	1992	0	19,773	2,305	9.2	9.2	0	36.0
Philippines	1963	0	1,800	1,133	2.0	2.0	0	3.8
Poland	1995	0	28,418	3,536	3.6	3.5	10[n]	14.3
Portugal	1992	0	31,575	12,499	1.9	1.9	0	2.1
Romania	1996	0	3,842	1,451	1.6	1.6	0	13.9
Russia	2003	0	6,098	2,255	n.a.	n.a.	n.a.	n.a.
Serbia and Montenegro	2001	0	87	n.a.	0.1	0.1	0	n.a.
Slovak Republic	1996	0	25,260	4,180	2.8	2.8	10	4.8
Slovenia	2001	0	26,931	11,160	1.6	1.6	0	3.0
Spain	1977	0	25,260	16,824	1.2	1.2	10	1.4
Sri Lanka	1987	0	1,034	863	1.2	1.2	0	3.5
Sweden	1996	0	34,364	30,286	1.0	1.0	0	n.a.
Switzerland	1984	0	24,254	45,680	0.5	0.5	0	0.4
Taiwan	1985	0	29,420	15,023	2.3	2.3	0	n.a.
Tanzania	1994	0	235	185	1.0	1.0	0	5.7
Thailand	1997	1	Full	2,721	n.a.	n.a.	0	n.a.
Trinidad & Tobago	1986	0	7,937	4,951	1.1	1.1	0	2.7
Turkey	1983	1	Full	2,887	n.a.	n.a.	0	n.a.
Uganda	1994	0	1,550	345	6.9	6.9	0	44.2
Ukraine	1998	0	281	840	0.3	0.3	0	1.6
United Kingdom	1982	0	19,611	21,616	2.0	1.8	10[o]	n.a.
United States	1934	0	100,000	30,956	2.8	2.8	0	8.7

Country	Date enacted	Unlimited guarantee (1=Yes; 0=No)	Coverage limit in 2003 (in US$)	GDP per capita in 2003 (in 1999 US$)	Coverage limit-to-GDP per capita in 2002	Coverage ratio adjusted for coinsurance in 2002	Maximum Coinsurance (in %) in 2002	Coverage limit-to-deposits per capita in 2002
Venezuela	1985	0	6,258	3,260	2.3	2.3	0	16.5
Vietnam	2000	0	1,948	351	4.5	4.5	0	n.a.
Zimbabwe	2003	0	3,640	665	n.a.	n.a.	n.a.	n.a.

[a] In Mexico, a blanket guarantee was in place until end-2002. The guarantee has been gradually removed and the coverage limit is to be reduced from 10,000,000 Investment Units UDIs) in 2003 to 400,000 Investment Units (UDIs), or about US$ 110,000 at the current exchange rate, by the year 2005.

[b] In Norway, a private guarantee fund for savings banks with voluntary membership had been in place since 1921, with membership becoming obligatory in 1924. A private guarantee fund for commercial banks was first introduced in 1938. Both guarantee funds were not pure deposit insurance schemes but had wide mandates to support member banks in liquidity or solvency crisis.

[c] Banks in Greenland with Danish ownership are covered by the Danish deposit insurance scheme.

[d] Moldova has adopted deposit insurance in 2004.

[e] While Bolivia does not have a formal deposit insurance system, it has a Financial Restructuring Fund set up in December 2001 that acts as deposit insurance.

[f] Uruguay has established a deposit insurance system in 2002 (Law on protection of bank deposits was enacted on December 27, 2002, creating a bank deposits collateral fund and a Superintendency of Bank Savings Protection), but it is not yet regulated.

[g] A proposal for explicit deposit insurance was drafted in 1999 by these 6 Francophone African countries but the proposal has only been ratified by 2 out of the 6 Communauté Économique et Monétaire de l'Afrique Centrale (CEMAC) countries: Cameroon, Central African Republic, Chad, Equatorial Guinea, Gabon, and Republic of Congo.

[h] Coinsurance of up to 15% (up to 350,000 Lek full insurance, and from 35,000 to 700,000 insurance at 85%).

[i] The equivalent of USD 2000 (per person per bank) is fully covered by insurance. 80% coverage is provided for the next USD 3000 (that is from USD 2000 to USD 5000). Amounts exceeding the equivalent of USD 5000 per person per bank are not insured.

[j] Full guarantee on time deposits; 90% coverage of savings deposits up to a limit of 120 Unidades de Fomento. (1 Unidad de Fomento = US$ 24).

[k] Coverage of 100% up to LTL 10,000 and the balance at 90 percent.

[l] Coverage of 100% up to 10,000 Euro; 90% next 10,000 Euro.

[m] Coverage is RO 20,000 or 75% of net deposits, whichever is less.

[n] Coverage is 100% of deposits up to 1000 Euro; and 90% from 1000 to 18000 Euro.

[o] Coverage is 100% of the first £2000, and 90% of the next £33,000.

Table 3. Summary statistics

This table presents summary statistics for the endogenous and explanatory variables used in the regressions. See Appendix 1 for a detailed explanation of variables and data sources.

Variable	Mean	Median	Std. dev.	Min	Max	No. obs
Endogenous						
Deposit Insurance (EI)	0.17	0.00	0.37	0.00	1.00	7783
Coverage ratio	6.24	2.45	13.73	0.05	117.86	919
Administration	0.55	1.00	0.50	0.00	1.00	1249
Membership	0.14	0.00	0.35	0.00	1.00	1249
Foreign currency deposits	0.75	1.00	0.43	0.00	1.00	1255
Interbank deposits	0.24	0.00	0.43	0.00	1.00	1255
Coinsurance	0.74	1.00	0.44	0.00	1.00	1220
Permanent fund	0.83	1.00	0.38	0.00	1.00	1256
Funding	0.01	0.00	0.12	0.00	1.00	1243
Moral-hazard composite	0.00	-0.04	1.00	-1.95	3.84	911
Explanatory						
Real Interest Rate	-0.88	1.33	12.36	-98.83	44.62	3962
Inflation	47.96	6.51	532.72	-31.91	26762.02	5788
GDP Growth	3.64	3.89	5.82	-34.86	34.31	5811
Credit Growth	20.38	14.91	27.24	-99.84	249.04	4821
Terms-of-Trade Change	0.46	0.00	12.79	-64.35	139.60	4346
GDP per capita	5.48	1.56	8.62	0.05	56.51	5748
External pressure	0.12	0.00	0.32	0.00	1.00	7783
World Bank Loan	0.01	0.00	0.10	0.00	1.00	7783
EU Directive	0.03	0.00	0.18	0.00	1.00	7783
EU Candidacy	0.01	0.00	0.12	0.00	1.00	7783
Emulation	0.17	0.11	0.14	0.02	0.48	7783
Crisis Dummy	0.07	0.00	0.25	0.00	1.00	7783
Post-crisis adoption	0.10	0.00	0.30	0.00	1.00	7783
Fiscal cost / GDP	0.56	0.00	4.13	0.00	55.10	7501
Gov. Ownership	54.31	53.08	34.98	0.00	100.00	3128
Bank deposits / GDP	0.34	0.25	0.34	0.00	7.78	4149
Executive Constraints	3.88	3.00	2.34	1.00	7.00	5563
Polity Score	-0.19	-3.00	7.64	-10.00	10.00	5563
Political Competition	4.88	3.00	3.77	1.00	10.00	5563
Bureaucracy	2.15	2.00	1.22	0.00	4.00	2464
Corruption	3.23	3.00	1.39	0.00	6.00	2464
Dem. Accountability	3.58	4.00	1.64	0.00	6.00	2464
Law & Order	3.65	4.00	1.56	0.00	6.00	2464

Table 4. Correlation matrix

This table shows the bivariate correlation between the variables used in the regressions and the significance level of each correlation coefficient. * indicates significance at the 5% level.

	Deposit insurance	Coverage ratio	Moral hazard composite	Real Interest Rate	Inflation	GDP Growth	Credit Growth	Terms of Trade Change	GDP per capita	External pressure	World Bank Loan	EU Directive	EU Candidacy	Emulation	Crisis Dummy	Post-crisis adoption	Fiscal cost / GDP	Gov. Ownership	Polity Score
Coverage ratio																			
Moral hazard composite		.65*																	
Real Interest Rate	.10*	.01	-.05																
Inflation	-.03*	-.04	-.01	-.43*															
GDP Growth	-.02	.02	.06	-.02	-.14*														
Credit Growth	-.04*	-.05	.04	-.41*	.45*	.18*													
Terms of trade change	.00	.02	.03	.00	-.01	.03	.00												
GDP per capita	.41*	-.26*	-.41*	.09*	-.08*	-.11*	-.26*	-.04											
External pressure	.27*	-.10*	-.08*	.08*	-.05	-.04	-.08*	.04	-.07*										
World Bank Loan	.15*	-.04	-.04	.04	-.01	.02	.03	-.01	-.17*	.21*									
EU Directive	.34*	-.15*	-.37*	.04	-.05	.00*	-.09	-.01	.28*	.23*	.07*								
EU Candidacy	.16*	-.08*	-.15*	.00	.03	.00	.10*	.01	-.17*	.19*	.35*	.39*							
Emulation	.37*	-.11*	-.12*	.08*	-.04	-.07*	-.03	.03	-.05	.80*	.23*	.35*	.23*						
Crisis Dummy	.10*	-.01	.09*	-.04	.13*	-.12*	.02	-.02	-.14*	-.04	-.04	-.13*	-.02	.03					
Post-crisis adoption	.06*	-.05	-.03	.00	-.01	-.01	.08*	.01	-.29*	.15*	.23*	.07*	.22*	.20*	.25*				
Fiscal cost / GDP	.12*	-.03	.03	-.04	.07*	-.15*	.03	-.03	-.05	.09*	-.05	-.10*	-.05	.12*	.78*	.18*			
Gov. ownership	-.24*	.27*	-.04	-.08*	.11	.07	.25*	.03	-.42*	-.10*	.03	-.13*	.15*	-.10*	.05	.03	-.05		
Polity score	.41*	-.22*	-.24*	.16*	-.03	-.20*	-.26*	-.06	.46*	-.02	.01	.26*	.10*	-.04	-.18*	-.06	-.04	-.19*	
Exec. constraints	.10*	-.23*	-.27*	.14*	-.03	-.19*	-.26*	-.06	.47*	-.02	.00	.28*	.14*	-.04	-.17*	-.02	-.04	-.22*	.96*

Table 5. Alternative models of deposit-insurance adoption

This table uses logit regressions to explain the adoption of explicit deposit insurance. The endogenous variable is the explicit deposit-insurance indicator. The regression in column 2 includes year dummies (not shown). Regression 3 is the same as 1 but includes the external pressure variable. Regression 4 is the same as regression 1 but adds the executive constraints variable. Regression 5 adds the executive constraints variable to regression 3. Regression 6 re-estimates model 5, restricting the sample to the post-1970 era. Regression 7 fits model 5 to the post-1980 era. Regression 8 fits model 5 and increases the sample size by excluding three macroeconomic explanatory variables. Regression 9 re-estimates model 8 but drops observations after deposit insurance is adopted in the country. Regression 10 presents the marginal effects and their standard errors of regression 8. An intercept is used but not shown. White standard errors are shown in brackets. The standard errors are adjusted for clustering at the country-level. *, **, *** indicate significance at the 10%, 5% and 1% level, respectively.

	1	2	3	4	5	6	7	8	9	10 Marginal effects
Real interest rate	0.026**	0.008	0.019*	0.018*	0.012	0.010	0.004			
	(0.012)	(0.008)	(0.011)	(0.011)	(0.010)	(0.009)	(0.008)			
Inflation	0.014**	0.011*	0.014**	0.012*	0.012*	0.009	0.007	-0.000	-0.001	-0.000
	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	(0.007)	(0.000)	(0.001)	(0.000)
GDP growth	-0.023	-0.009	-0.021	-0.024	-0.021	-0.006	0.002	-0.004	-0.039*	-0.000
	(0.014)	(0.016)	(0.015)	(0.018)	(0.019)	(0.019)	(0.023)	(0.013)	(0.023)	(0.002)
Credit growth	0.001	0.002	0.003	0.002	0.004	0.003	0.003			
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)			
Terms of trade	-0.001	-0.002	-0.002	0.001	-0.000	-0.001	0.002			
	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)			
GDP per capita	0.098***	0.125***	0.110***	0.069***	0.084***	0.086***	0.102***	0.078***	0.045***	0.010***
	(0.020)	(0.026)	(0.022)	(0.021)	(0.025)	(0.024)	(0.025)	(0.020)	(0.015)	(0.003)
External pressure			1.476***		1.557***	1.422***	1.244***	1.579***	0.813**	0.292***
			(0.227)		(0.245)	(0.234)	(0.215)	(0.197)	(0.339)	(0.041)
Executive constraints				0.263***	0.255***	0.268***	0.260***	0.325***	0.240***	0.042***
				(0.081)	(0.087)	(0.089)	(0.091)	(0.070)	(0.058)	(0.010)
Observations	3091	3091	3091	2831	2831	2517	1958	4685	3733	4685
Countries	136	136	136	123	123	123	122	147	144	147
% correct	78.62	78.58	78.55	77.71	79.90	79.02	77.57	84.27	78.23	84.27
Model χ^2	32.61	238.87	60.12	45.15	66.71	64.00	71.54	112.13	41.33	112.13
Pseudo R^2	0.15	0.24	0.19	0.18	0.22	0.23	0.24	0.25	0.07	0.25

Table 6. Robustness experiments investigating alternative external pressure variables

This table compares alternative logit regressions seeking to explain the adoption of explicit deposit insurance. The endogenous variable is the explicit deposit insurance indicator. An intercept is used but not shown. White standard errors are shown in brackets. The standard errors are adjusted for clustering at the country-level. *, **, *** indicate significance at the 10%, 5% and 1% level, respectively.

Panel A. Without time trend

	1	2	3	4	5	6	7	8
Inflation	-0.000	-0.000	-0.000	-0.001	-0.000	-0.000	-0.000	-0.000
	(0.000)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
GDP Growth	-0.004	-0.007	-0.008	-0.008	-0.004	-0.005	-0.004	-0.005
	(0.013)	(0.012)	(0.012)	(0.012)	(0.013)	(0.013)	(0.013)	(0.013)
GDP per capita	0.078***	0.074***	0.065***	0.075***	0.080***	0.074***	0.081***	0.075***
	(0.020)	(0.018)	(0.018)	(0.018)	(0.020)	(0.020)	(0.020)	(0.020)
External pressure	1.579***				1.491***	1.476***	1.526***	1.401***
	(0.197)				(0.193)	(0.205)	(0.196)	(0.200)
World Bank Loan		2.082***			1.569***			1.328**
		(0.486)			(0.570)			(0.593)
EU Directive			2.221***			1.961***		1.862***
			(0.467)			(0.490)		(0.488)
EU Candidacy				1.645***			1.353**	
				(0.500)			(0.545)	
Executive Constraints	0.325***	0.325***	0.294***	0.306***	0.319***	0.291***	0.303***	0.288***
	(0.070)	(0.066)	(0.066)	(0.066)	(0.070)	(0.071)	(0.071)	(0.071)
Observations	4685	4685	4685	4685	4685	4685	4685	4685
No. of countries	147	147	147	147	147	147	147	147
Model χ^2	112.13	72.06	93.46	71.34	113.18	119.85	114.28	123.11
Pseudo R^2	0.25	0.22	0.24	0.22	0.26	0.27	0.26	0.28

Panel B. With a linear time trend

	1	2	3	4	5	6	7	8
Inflation	-0.001	-0.000	-0.000	-0.000	-0.001	-0.001	-0.001	-0.000
	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
GDP Growth	0.017	0.009	0.014	0.016	0.016	0.014	0.016	0.013
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.012)	(0.013)	(0.013)
GDP per capita	0.086***	0.088***	0.088***	0.087***	0.088***	0.083***	0.088***	0.084***
	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)
External pressure				0.325*				0.301
				(0.197)				(0.199)
World Bank Loan					1.147**			0.994*
					(0.497)			(0.524)
EU Directive						1.232***		1.169**
						(0.474)		(0.474)
EU Candidacy							0.749	
							(0.516)	
Executive Constraints	0.320***	0.316***	0.318***	0.320***	0.315***	0.295***	0.305***	0.293***
	(0.077)	(0.077)	(0.077)	(0.078)	(0.078)	(0.078)	(0.079)	(0.079)
Time trend	0.085***		0.053*	0.078***	0.083***	0.078***	0.083***	0.070***
	(0.016)		(0.028)	(0.017)	(0.016)	(0.015)	(0.016)	(0.016)
Emulation		6.556***	2.630					
		(0.975)	(1.769)					
Observations	4685	4685	4685	4685	4685	4685	4685	4685
No. of countries	147	147	147	147	147	147	147	147
Model χ^2	77.83	87.05	82.16	85.03	82.22	93.36	81.79	104.06
Pseudo R^2	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.32

Table 7. Robustness experiments focused on the effects of crisis experience, government ownership of banks, and quality of institutions

This table compares alternative logit regressions seeking to explain the adoption of explicit deposit insurance. The endogenous variable is explicit deposit insurance indicator. An intercept is used but not shown. White standard errors are shown in brackets. The standard errors are adjusted for clustering at the country-level. *, **, *** indicate significance at the 10%, 5% and 1% level, respectively.

	1	2	3	4	5	6	7	8	9
Inflation	-0.000	-0.000	-0.001	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
GDP Growth	0.007	-0.002	-0.005	-0.044*	-0.007	0.006	0.010	0.007	-0.021
	(0.013)	(0.013)	(0.015)	(0.026)	(0.017)	(0.018)	(0.017)	(0.017)	(0.017)
GDP per capita	0.084***	0.087***	0.078***	0.049*	0.058***	0.068***	0.112***	0.085***	0.076***
	(0.021)	(0.022)	(0.020)	(0.027)	(0.019)	(0.025)	(0.025)	(0.023)	(0.025)
External pressure	1.640***	1.604***	1.565***	0.266	1.753***	1.078***	0.853***	1.040***	1.582***
	(0.214)	(0.210)	(0.216)	(0.275)	(0.227)	(0.190)	(0.232)	(0.183)	(0.220)
Executive constraints	0.330***	0.306***	0.361***	0.246**	0.283***	0.260***	0.336***	0.287***	0.259***
	(0.071)	(0.071)	(0.073)	(0.116)	(0.080)	(0.088)	(0.090)	(0.088)	(0.083)
Crisis dummy	1.234***								
	(0.279)								
Post-crisis adoption		0.867**							
		(0.387)							
Fiscal cost / GDP			0.043***						
			(0.017)						
Privatization				1.729***					
				(0.345)					
Gov. Ownership					0.003				
					(0.005)				
Bureaucracy						0.269			
						(0.191)			
Corruption							-0.270*		
							(0.143)		
Law & Order								0.043	
								(0.123)	
Bank deposits / GDP									0.334
									(0.713)
Observations	4685	4685	4439	1851	2513	2081	2081	2081	3527
Number of countries	147	147	147	47	85	125	125	125	132
Model χ^2	116.39	104.73	105.87	56.49	83.49	67.26	85.56	72.68	85.28
Pseudo R^2	0.27	0.26	0.28	0.24	0.21	0.24	0.25	0.24	0.23

Table 8. Robustness experiments investigating alternative political variables

This table compares alternative logit regressions seeking to explain the adoption of explicit deposit insurance. The endogenous variable is the explicit deposit insurance indicator. An intercept is used but not shown. White standard errors are shown in brackets. The standard errors are adjusted for clustering at the country-level. *, **, *** indicate significance at the 10%, 5% and 1% level, respectively.

	1	2	3
Inflation	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)
GDP Growth	-0.005	-0.006	0.007
	(0.013)	(0.013)	(0.016)
GDP per capita	0.078***	0.078***	0.068***
	(0.020)	(0.019)	(0.019)
External pressure	1.530***	1.482***	1.069***
	(0.203)	(0.206)	(0.177)
Polity Score	0.103***		
	(0.021)		
Political Competition		0.201***	
		(0.039)	
Dem. Accountability			0.454***
			(0.115)
Observations	4685	4685	2275
No. of countries	147	147	133
Model χ^2	118.28	118.97	84.17
Pseudo R^2	0.26	0.25	0.23

Table 9. Robustness experiments focused on the influence of region and population size

This table compares alternative logit regressions seeking to explain the adoption of explicit deposit insurance. The endogenous variable is the explicit deposit-insurance indicator. Regressions in columns 1 to 2 exclude current European Union members. Regressions in columns 3 to 4 exclude countries with fewer than one-million inhabitants. Regressions in columns 5 and 6 include dummies by continent. An intercept is used but not shown. White standard errors are shown in brackets. The standard errors are adjusted for clustering at the country-level. *, **, *** indicate significance at the 10%, 5% and 1% level, respectively.

	Excluding EU members			Excluding countries with pop.< 1million			With dummies by continent		
	1	2	3	4	5	6	7	8	9
Inflation	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.001	-0.001	-0.001
	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)
GDP Growth	-0.006	-0.002	-0.000	-0.011	-0.008	-0.002	-0.015	-0.008	-0.008
	(0.009)	(0.009)	(0.013)	(0.010)	(0.011)	(0.013)	(0.010)	(0.011)	(0.014)
GDP per capita	0.083***	0.087***	0.065***	0.103***	0.110***	0.074***	0.057***	0.062***	0.059***
	(0.021)	(0.023)	(0.024)	(0.019)	(0.021)	(0.019)	(0.016)	(0.017)	(0.020)
External pressure		1.460***	1.347***		1.725***	1.577***		1.852***	1.803***
		(0.186)	(0.213)		(0.188)	(0.203)		(0.194)	(0.228)
Executive constraints			0.319***			0.344***			0.276***
			(0.077)			(0.071)			(0.080)
Observations	4757	4757	3958	4858	4858	4517	5609	5609	4541
Number of countries	145	145	124	143	143	140	170	170	143
Model χ^2	16.50	74.61	83.78	32.49	95.62	107.66	114.41	170.91	168.30
Pseudo R^2	0.08	0.12	0.19	0.15	0.20	0.26	0.22	0.27	0.32

Table 10. Hazard models of deposit-insurance adoption

This table compares alternative hazard regressions seeking to explain the hazard rate of adopting explicit deposit insurance over the period 1934-2003. The model considers the adoption of deposit insurance as a "transforming event." The endogenous variable is the number of years between 1934 and the adoption date. Columns 1, 5 and 7 use a proportional Cox (1972) hazard model. Columns 2 to 4, 6, and 8-11 estimate other parametric survival models. The assumed distributions of the hazard function in column 2 is exponential and in columns 3-4, 6, and 8-11 Weibull. The coefficients reported are the logarithms of the underlying relative-hazard coefficients. The number of adopting countries is the number of countries that have adopted deposit insurance during the observation period. An intercept is used but not shown. Lin and Wei (1989) standard errors are shown in brackets. The standard errors are adjusted for clustering at the country-level. *, **, *** indicate significance at the 10%, 5% and 1% level, respectively.

	Cox	Exponential	Weibull	Weibull	Cox	Weibull	Cox	Weibull	Weibull	Weibull	Weibull	Weibull
	1	2	3	4	5	6	7	8	9	10	11	12
Inflation	-0.001	-0.000	-0.001	0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002	-0.002
	(0.001)	(0.000)	(0.001)	(0.008)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
GDP growth	-0.007	-0.021	-0.001	-0.038	-0.031	-0.019	-0.019	-0.005	-0.005	-0.010	-0.012	-0.014
	(0.020)	(0.018)	(0.020)	(0.025)	(0.026)	(0.025)	(0.025)	(0.024)	(0.024)	(0.025)	(0.024)	(0.024)
GDP per capita	0.072***	0.068***	0.069***	0.075***	0.051***	0.048***	0.062***	0.058***	0.058***	0.062***	0.059***	0.059***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.013)	(0.013)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Real interest rate				-0.010								
				(0.012)								
Credit growth				0.003								
				(0.006)								
Terms of trade				0.000								
				(0.006)								
Executive constraints					0.215***	0.224***	0.208***	0.219***	0.219***	0.205***	0.181***	0.177***
					(0.064)	(0.064)	(0.063)	(0.064)	(0.064)	(0.064)	(0.064)	(0.064)
Crisis dummy							1.265***	1.246***	1.247***	1.129***	1.158***	1.128***
							(0.304)	(0.271)	(0.284)	(0.267)	(0.279)	(0.278)
External pressure									0.007			
									(0.377)			
World Bank Loan										1.869***		
										(0.344)		
EU Directive											1.221***	
											(0.277)	
EU Candidacy												1.286***
												(0.265)
Observations	4567	4567	4567	2303	3730	3730	3730	3730	3730	3730	3730	3730
Number of countries	166	166	166	130	145	145	145	145	145	145	145	145
Number of adopting countries	74	74	74	57	68	68	68	68	68	68	68	68

Evolutionary parameter α	4.48	4.26	4.49	4.26	4.00	4.05	4.02
(p-value)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)

Table 11. Predicted year of adoption for countries that have not adopted deposit insurance as of yearend 2002

Predicted year of adoption based on the Weibull duration model in column 9, Table 10, for countries with no deposit insurance in 2002. We also report estimates of the number of years until each country without an EDIS can be expected to adopt deposit insurance under year 2002 circumstances (the last year of our sample period). We could not estimate the expected adoption year for the following countries due to missing information for some of the model variables: Afghanistan, Barbados, Belize, Brunei, Cape Verde, Comoro Islands, Cuba, Democratic Republic of Congo, Grenada, Hong Kong, Iraq, Israel, Kiribati, Libya, Maldives, Malta, Myanmar, Qatar, Saudi Arabia, Seychelles, Solomon Islands, Somalia, St. Lucia, Suriname, United Arab Emirates, Vanuatu, and Western Samoa. Countries that have adopted deposit insurance since 2002 are marked with an asterisk. See notes for additional information about select countries.

Country	Predicted adoption year	Predicted years until adoption (from 2002)
Australia	1981	-21
New Zealand	1985	-17
Singapore	1989	-13
China	1993	-9
Mauritius	1996	-6
Botswana	1996	-6
South Africa	1996	-6
Costa Rica	1996	-6
Paraguay*	1998	-4
Bolivia*	1999	-3
Papua New Guinea	1999	-3
Lesotho	1999	-3
Panama	1999	-3
Moldova*	1999	-3
Mongolia	2000	-2
Fiji	2000	-2
Senegal	2002	0
Ghana	2003	1
Namibia	2004	2
Russia*	2004	2
Guyana	2005	3
Madagascar	2006	4
Cote d'Ivoire	2006	4
Armenia	2006	4

Country	Predicted adoption year	Predicted years until adoption (from 2002)
Guinea-Bissau	2006	4
Central African Rep.	2006	4
Georgia	2006	4
Benin	2006	4
Niger	2006	4
Zambia	2007	5
Sierra Leone	2007	5
Mali	2007	5
Iran	2009	7
Kyrgyz Republic	2010	8
Cambodia	2010	8
Malawi	2010	8
Tajikistan	2011	9
Mozambique	2011	9
Morocco	2013	11
Egypt	2013	11
Djibouti	2013	11
Syria	2013	11
Guinea	2014	12
Nepal	2014	12
Gabon	2014	12
Mauritania	2014	12
Haiti	2014	12
Ethiopia	2014	12
Laos	2014	12
Burkina Faso	2014	12
Burundi	2015	13
Tunisia	2016	14
Equatorial Guinea	2017	15
Swaziland	2017	15
Republic of Congo	2018	16
Cameroon	2018	16

Country	Predicted adoption year	Predicted years until adoption (from 2002)
Togo	2018	16
Pakistan	2018	16
Gambia	2018	16
Angola	2018	16
Bhutan	2018	16
Azerbaijan	2019	17
Rwanda	2019	17
Yemen	2019	17
Eritrea	2019	17
Chad	2019	17
Liberia	2020	18
Zimbabwe*	2021	19
Sudan	2023	21
Uzbekistan	2024	22

Notes:

a. Albania and Uruguay have established deposit insurance systems in 2002.

b. Malta, Paraguay, Russia, and Zimbabwe have adopted deposit insurance in 2003.

c. Moldova has adopted deposit insurance in 2004.

d. While Bolivia does not have a formal deposit insurance system, it has a Financial Restructuring Fund set up in December 2001 that acts as deposit insurance.

e. A proposal for explicit deposit insurance was drafted in 1999 by these 6 Francophone African countries but the proposal has only been ratified by 2 out of the 6 Communauté Économique et Monétaire de l'Afrique Centrale (CEMAC) countries: Cameroon, Central African Republic, Chad, Equatorial Guinea, Gabon, and Republic of Congo.

f. To our knowledge, several countries have considered (or are considering) the adoption of deposit insurance: Australia, New Zealand, Singapore, China, South Africa, Namibia, and Pakistan.

Table 12. Heckman two-step selection model for deposit-insurance coverage and other design features

This table reports a series of Heckman two-stage selection regressions for design features. The endogenous variable in the first-stage regression (selection equation) is the explicit deposit insurance indicator. The endogenous variable in the second-stage (design equation) is the logarithm of the indicated deposit-insurance coverage ratio. Coverage ratio is the ratio of coverage limit per person to GDP per capita. Coverage ratio adjusted for coinsurance is the ratio of the effective coverage per person (i.e., adjusting the coverage limit for the percentage of coinsurance) to GDP per capita, where effective coverage is calculated by adjusting the coverage limit by the amount of coinsurance. Coverage limit to deposits is the ratio of coverage limit per person to bank deposits per capita. Moral-hazard is an index based on the first principal component of the following design features: Coverage ratio, Administration, Membership, Foreign currency deposits, Interbank deposits, Coinsurance, Permanent fund, and Funding. All design features have been transformed to standardized variables (with mean zero and standard deviation of one) for the principal component calculations. Moral-hazard without coverage is an alternative moral-hazard index variable that focuses on design features excluding the coverage ratio. We report Heckman's (1979) two-step efficient estimates. Standard errors are shown in brackets and *, **, *** indicate significance at the 10%, 5% and 1% level, respectively.

	Coverage ratio	Coverage ratio adjusted for coinsurance	Coverage limit to deposits	Moral-hazard	Moral-hazard without coverage
Second-stage: Design	1	2	3	4	5
Inflation	-0.004***	-0.004***	-0.003***	-0.002***	-0.001**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)
GDP Growth	-0.018*	-0.016	-0.021*	0.006	0.006
	(0.010)	(0.010)	(0.013)	(0.010)	(0.010)
GDP per capita	-0.000	0.002	-0.020	0.012	0.013
	(0.011)	(0.011)	(0.015)	(0.011)	(0.010)
External pressure	0.174	0.216	0.358	0.449**	0.465**
	(0.218)	(0.223)	(0.308)	(0.217)	(0.187)
Executive constraints	0.061	0.071	0.059	0.089*	0.088*
	(0.054)	(0.055)	(0.075)	(0.054)	(0.051)
Crisis dummy	0.605***	0.676***	0.564***	0.631***	0.702***
	(0.155)	(0.158)	(0.207)	(0.154)	(0.153)
Post-crisis adoption	0.207	0.190	0.452**	0.191	0.149
	(0.154)	(0.157)	(0.212)	(0.154)	(0.134)
Heckman Lambda	0.980***	1.053***	1.410***	1.037***	1.023***
	(0.346)	(0.353)	(0.482)	(0.349)	(0.310)
First-stage: DI					
Inflation	-0.001***	-0.001***	-0.001**	-0.001**	-0.000*
	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)
GDP Growth	-0.001	-0.001	-0.004	-0.002	0.001
	(0.006)	(0.006)	(0.006)	(0.006)	(0.005)
GDP per capita	0.050***	0.050***	0.048***	0.051***	0.054***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)

External pressure	0.949***	0.949***	0.943***	0.932***	0.931***
	(0.069)	(0.069)	(0.070)	(0.070)	(0.068)
Executive constraints	0.178***	0.178***	0.181***	0.177***	0.183***
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
Crisis dummy	0.488***	0.488***	0.472***	0.476***	0.618***
	(0.087)	(0.087)	(0.089)	(0.088)	(0.080)
Post-crisis adoption	0.510***	0.510***	0.515***	0.507***	0.441***
	(0.073)	(0.073)	(0.074)	(0.073)	(0.072)
Observations	4492	4492	4435	4484	4600
Censored observations	3665	3665	3665	3665	3665

Table 13. Predicted coverage ratios for countries that have not adopted deposit insurance as of yearend 2002

Predicted coverage ratio based on the Heckman two-step model in column 1, Table 12, for countries with no deposit insurance in 2002. We could not estimate the expected coverage ratio for the following countries due to missing information for some of the model variables: Afghanistan, Barbados, Belize, Brunei, Cape Verde, Comoro Islands, Cuba, Democratic Republic of Congo, Grenada, Hong Kong, Iraq, Israel, Kiribati, Libya, Maldives, Malta, Myanmar, Qatar, Saudi Arabia, Seychelles, Solomon Islands, Somalia, St. Lucia, Suriname, United Arab Emirates, Vanuatu, and Western Samoa. Countries that have adopted deposit insurance since 2002 are marked with an asterisk. See notes for additional information about select countries.

Country	Predicted coverage ratio (2002)
Angola	0.41
Zimbabwe*	0.57
Uzbekistan	0.57
Sudan	0.61
Chad	0.64
Liberia	0.64
Azerbaijan	0.65
Eritrea	0.66
Rwanda	0.67
Bhutan	0.67
Yemen	0.69
Tajikistan	0.69
Mozambique	0.70
Pakistan	0.71
Swaziland	0.72
Cameroon	0.73
Gabon	0.73
Iran	0.73
Laos	0.74
Republic of Congo	0.74
Togo	0.74
Armenia	0.74
Gambia	0.74
Burundi	0.74
Equatorial Guinea	0.75
Burkina Faso	0.75

Country	Predicted coverage ratio (2002)
Tunisia	0.75
Morocco	0.76
Guinea	0.77
Mauritania	0.77
Egypt	0.78
Mali	0.78
Syria	0.78
Ethiopia	0.78
Singapore	0.79
Djibouti	0.81
Cambodia	0.81
Haiti	0.82
Malawi	0.82
Russia*	0.82
Zambia	0.83
Sierra Leone	0.83
Nepal	0.84
Georgia	0.84
Benin	0.85
Ghana	0.85
Namibia	0.87
Central African Republic	0.87
Niger	0.88
Kyrgyz Republic	0.89
Moldova*	0.91
Fiji	0.92
Mongolia	0.92
Guyana	0.93
Cote d'Ivoire	0.94
Senegal	0.95
Mauritius	0.96
Lesotho	0.96
Costa Rica	0.97
South Africa	0.98

Country	Predicted coverage ratio (2002)
Australia	0.98
Botswana	0.98
Panama	0.98
New Zealand	0.99
Guinea-Bissau	0.99
Bolivia*	1.01
Papua New Guinea	1.06
Paraguay*	1.06
Madagascar	1.10
China	1.33

Notes:

a. Albania and Uruguay have established deposit insurance systems in 2002.

b. Malta, Paraguay, Russia, and Zimbabwe have adopted deposit insurance in 2003.

c. Moldova has adopted deposit insurance in 2004.

d. While Bolivia does not have a formal deposit insurance system, it has a Financial Restructuring Fund set up in December 2001 that acts as deposit insurance.

e. A proposal for explicit deposit insurance was drafted in 1999 by these 6 Francophone African countries but the proposal has only been ratified by 2 out of the 6 Communauté Économique et Monétaire de l'Afrique Centrale (CEMAC) countries: Cameroon, Central African Republic, Chad, Equatorial Guinea, Gabon, and Republic of Congo.

Appendix 1. Variable definitions and data sources

Whenever we indicate the data source as "Authors' calculation", we refer to the data section of this paper and to Appendix 2 for details about the data sources and variable definitions.

Variable	Definition	Source
Deposit Insurance	Dummy that equals 1 if the country has explicit deposit insurance (including blanket guarantees) and 0 if it has implicit deposit insurance.	Authors' calculation.
Coverage ratio	Coverage limit of the EDIS in local currency divided by GDP per capita. Missing for countries with full coverage.	Authors' calculation
Coverage ratio adjusted for coinsurance	Coverage limit of the EDIS adjusted for coinsurance divided by GDP per capita. Missing for countries with full coverage.	Authors' calculation
Coinsurance	Maximum coinsurance percentage of the EDIS. Zero for countries with full coverage.	Authors' calculation
Coverage limit to deposits	Coverage limit of the EDIS in local currency divided by bank deposits per capita. Missing for countries with full coverage.	Authors' calculation
Moral hazard	Principal component of the variables coverage ratio, administration, membership, foreign deposits, interbank deposits, coinsurance, permanent fund, and funding. All variables are standardized with mean of zero and standard deviation of one before conducting the principal component analysis.	Authors' calculation
Moral hazard without coverage	Principal component of the variables administration, membership, foreign deposits, interbank deposits, coinsurance, permanent fund, and funding. All variables are standardized with mean of zero and standard deviation of one before conducting the principal component analysis.	Authors' calculation
Administration	Equals 0 if the administration of the EDIS is private or joint, 1 if it is public, and missing otherwise	Authors' calculation
Membership	Equals 0 if membership to the EDIS is compulsory to all banks, 1 if it is voluntary, and missing otherwise.	Authors' calculation
Foreign currency deposits	Equals 0 if foreign deposits are not covered by the EDIS, 1 if they are covered, and missing otherwise.	Authors' calculation
Interbank deposits	Equals 0 if interbank deposits are not covered by the EDIS, 1 if they are covered, and missing otherwise.	Authors' calculation
Coinsurance	Equals 0 if EDIS has coinsurance, 1 if it has no coinsurance, and missing otherwise.	Authors' calculation

Variable	Definition	Source
Fund	Equals 0 if EDIS but no permanent fund,1 if permanent fund, and missing otherwise.	Authors' calculation
Funding	Equals 0 if source of funding of the EDIS is private or joint, 1 if it is public, and missing otherwise.	Authors' calculation
Real Interest Rate	Real interest rate (in %) equals nominal interest rate minus inflation rate.	IFS (nominal interest rate is the treasury, discount or deposit rate depending on availability – lines 60c, 60, or 60l) and WDI (inflation rate is the change in the consumer price index)
Inflation	Inflation, GDP deflator (annual %).	WDI
GDP Growth	Real GDP growth rate (in %).	WDI
Credit Growth	Real private credit growth rate (divided by GDP deflator) (in %).	IFS (private credit is line 32d) and WDI (GDP deflator)
Terms-of-Trade Change	Percentage change in terms of trade.	WDI
GDP per capita	GDP per capita (constant 1995 thousands of US$).	WDI
External pressure	Dummy variable that takes a value of one for the years 1999 and onwards, the year 1999 being the year that the IMF endorsed deposit insurance by publishing a paper on best practices and guidelines in deposit insurance.	Garcia (2000)
World Bank Loan	Dummy variable that takes the value of one during and following the year that the World Bank started an adjustment lending program with the country for reforms to establish deposit insurance (in addition to possibly other objectives), and zero otherwise. This variable takes a value of one for the following countries and periods (between brackets): Albania (2002 and onwards), Bolivia (1998 and onwards), Bosnia-Herzegovina (1996 and onwards), Croatia (1995 and onwards), El Salvador (1996 and onwards), Jordan (1995 and onwards), Lithuania (1996 and onwards), Nicaragua (2000 and onwards), Poland (1993 and onwards), Romania (1996 and onwards), Russia (1997 and onwards), Ukraine (1998 and onwards).	World Bank (2004)
EU Directive	Dummy variable that takes a value of one for the years 1994 and onwards for EU member countries only (the EU-15), and zero otherwise. The year 1994 was the year when the EU Directive on Deposit Insurance came into force.	EU (1994)
EU Candidacy	Dummy variable that takes a value of one for the years 1994 and onwards for EU candidate countries only (i.e., Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovak Republic, Slovenia), and zero otherwise. The year 1994 was the year when the EU Directive on Deposit Insurance came into force.	EU (1994)

Variable	Definition	Source
Emulation	Proportion of countries with explicit deposit insurance at a given year (in %).	Authors' calculation
Crisis Dummy	Systemic banking crisis dummy equals 1 if the country experiences a systemic crisis in that year and 0 otherwise from 1976 to October 2003.	Caprio, Klingebiel, Laeven and Noguera (2005)
Post-crisis adoption	Equals 1 if DIS was adopted between 0 and 3 years following a crisis, and 0 otherwise	Caprio, Klingebiel, Laeven and Noguera (2005)
Fiscal cost / GDP	Fiscal cost of banking crisis resolution (as % of GDP), values reported during the crisis period and 0 otherwise	Caprio, Klingebiel, Laeven and Noguera (2005)
Gov. Ownership	Government ownership of banks in 1970 used for 1970 to 1994 and in 1995 onwards (in %).	La Porta, Lopez-de-Silanes, and Shleifer (2002)
Privatization	Bank privatization dummy equals 1 if first state-owned bank privatization took place.	Boehmer, Nash, and Netter (2003)
Bank deposits / GDP	Demand, time and saving deposits in deposit money banks as a share of GDP, calculated using the following deflation method: $\{(0.5)*[D_t/Pe_t + D_{t-1}/Pe_{t-1}]\}/[GDP_t/Pa_t]$, where D is demand and time and saving deposits, Pe is end-of period CPI, and Pa is average annual CPI, and t is year t.	Beck, Demirgüç-Kunt, and Levine (2003), Financial Structure Database. Raw data are from the electronic version of the IMF's International Financial Statistics (IFS lines 24 and 25). Data on GDP in local currency (lines 99) and annual CPI (line 64).
Polity Score	Index combining democracy and autocracy scores. It ranges from –10 to 10, where negative scores are assigned to countries under autocracies and positive values to countries under democracies and –10 and 10 are the extreme cases of these two systems. Autocracies sharply restrict or suppress competitive political participation. Their chief executives are chosen in a regularized process of selection within the political elite, and once in office they exercise power with few institutional constraints. Democracy is conceived as three essential, interdependent elements. One is the presence of institutions and procedures through which citizens can express effective preferences about alternative policies and leaders. Second is the existence of institutionalized constraints on the exercise of power by the executive. Third is the guarantee of civil liberties to all citizens in their daily lives and in acts of political participation.	Polity IV, INSCR Program, CIDCM, University of Maryland, College Park
Executive Constraints	Index measuring the extent of institutionalized constraints on the decision-making powers of chief executives. Such limitations may be imposed by any accountability group. The index ranges from 1 to 7, where 1 represents unlimited authority and 7 Executive parity or subordination.	Polity IV, INSCR Program, CIDCM, University of Maryland, College Park
Political Competition	Index combining regulation of participation and competitiveness of participation scores. It ranges from 1 to 10, where higher scores represent more political competition. Participation is regulated to the extent that there are binding rules on when, whether, and how political	Polity IV, INSCR Program, CIDCM, University of Maryland, College Park

Variable	Definition	Source
	preferences are expressed. One-party states and Western democracies both regulate participation but they do so in different ways, the former by channeling participation through a single party structure, with sharp limits on diversity of opinion; the latter by allowing relatively stable and enduring groups to compete nonviolently for political influence. The polar opposite is unregulated participation, in which there are no enduring national political organizations and no effective regime controls on political activity. In such situations political competition is fluid and often characterized by recurring coercion among shifting coalitions of partisan groups. The competitiveness of participation refers to the extent to which alternative preferences for policy and leadership can be pursued in the political arena.	
Bureaucracy	Index measuring the institutional strength and quality of the bureaucracy. It ranges from 0 to 4. High points are given to countries where the bureaucracy has the strength and expertise to govern without drastic changes in policy or interruptions in government services. In these low-risk countries, the bureaucracy tends to be somewhat autonomous from political pressure and to have an established mechanism for recruitment and training. Countries that lack the cushioning effect of a strong bureaucracy receive low points because a change in government tends to be traumatic in terms of policy formulation and day-to-day administrative functions.	International Country Risk Guide (ICRG)
Corruption	Index measuring the extent to which bribery is present within the political system. Forms of corruption considered are related to bribes in the areas of exchange controls, tax assessments, police protection, loans, and licensing of exports and imports. It ranges from 0 to 6, where low scores indicate high levels of corruption.	International Country Risk Guide (ICRG)
Dem. Accountability	Index measuring how responsive government is to its people, on the basis that the less responsive it is, the more likely it is that the government will fall, peacefully in a democratic society, but possibly violently in a non-democratic one. It ranges from 0 to 6, where 0 is assigned to autarchies and 6 to alternating democracies.	International Country Risk Guide (ICRG)
Law & Order	Index measuring a country's legal system and rule of law. It ranges from 0 to 6, where a high score indicates high level of law and order. Law and order are assessed separately, with each sub-component comprising zero to three points. The law sub-component is an assessment of the strength and impartiality of the legal system while the order sub-component is an assessment of popular observance of law.	International Country Risk Guide (ICRG)

Appendix 2: Description of deposit insurance schemes and data sources

In this appendix we provide details on the deposit insurance schemes in each country, including the relevant laws and names of the governing institutions, along with sources for our data on deposit insurance coverage and other design features. Available data has been complemented by contacting individual deposit insurers or related agencies (such as the Central Bank or a bank resolution agency) and by interviewing World Bank country economists.

Albania. (*Albanian Deposit Insurance Agency, Law No. 8873, Law on the Insurance of the Deposits*) The explicit deposit insurance scheme (EDIS) of Albania was established in March 2002. It has an official administration by the Deposit Insurance Agency. The membership for the fund is compulsory and is contributed by both the state and the banks, where the premiums are not risk-adjusted and they are 0.5% of the average insured deposits. The deposits of up to 350,000 lek are fully insured, and 85% of 350,000 to 700,000 lek is insured.
Sources: Bank of Albania (2002), "On the Creation of the Insurance Deposits Agency"; International Association of Deposit Insurers (IADI) Member Profiles: Albanian Deposit Insurance Agency (2003).

Algeria. (*Bank of Algeria*) The deposit insurance mechanism was established in December 1997. The maximum coverage is 600,000 Algerian dinars per depositor per institution and it has not changed since establishment as of 2004. The system was introduced in response to the expansion of the banking sector with the start up of many private national and international banks. Prior to this date, all the deposit banks were owned by the state (the treasury) with an implicit blanket guarantee.
Source: Authors' Survey of Deposit Insurers.

Argentina. (*SEDESA, Law 24, 485*) Before 1979 deposits were unconditionally guaranteed by the Argentinean government. In 1979 an explicit system of deposit insurance scheme was established by the military government. The scheme was optional for private banks and required the insured banks to make contributions to the fund. The central bank provided full coverage for the first million pesos (about $640) and ninety percent thereafter. Later in 1991 the scheme was abolished and substituted by a more transparent supervision. In April 1995, an insurance scheme was re-introduced following the suspension of five private banks by the government. The scheme (SEDESA) covers all types of deposits except ones that pay more than 200 basis points above the reference rate. Membership to the system is compulsory. The scheme has private administration. Current accounts, savings accounts and time deposits are covered up to $30,000. The initial coverage limit of the system was 75% of 100 Million $Arg. This limit was reduced to 75% of 81,000 $Arg. The monthly premiums for banks are 0.015% to 0.06% of deposits. Additional assessments set by the central bank are also made based on a bank's risk evaluation. The deposits of foreign branches of Argentine banks are not subject to the scheme and deposits of foreign bank branches in Argentina are subject to the scheme. *Sources*: Garcia (1999); Institute of International Bankers (1999), "Global Survey 1999"; Kyei (1995); Miller, Geoffrey P. (1993), "Politics of Deposit Insurance Reform: The Case of Argentina," FDICIA: An Appraisal, Proceedings of the 29th Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago; Oxford Analytica Brief (1995), "Argentina: Banking Shakeout," April 20; SEDESA (2003), http://200.61.172.161./__english/index.php?dir=sobre&file=cober; Talley and Mas (1990).

Austria. (*Deposit Guarantee Fund, Credit System Act*) The Deposit Guarantee Fund was established in 1979 and was revised according to the EU directives after 1995. The system has private administration. Funding is ex-post. Government bonds may be issued when necessary. Initially the coverage limit was ATS 200,000 and it was raised to ATS 260,000 in April 1996 following Austria's entry to the EC. After the ATS/EUR parity was fixed, the sum was slightly adjusted to ATS 275,000 in 1999 since the Euro became legal tender in Austria amounting to EUR 20,000. Deposits of the government, large corporations, insiders and criminals are excluded. The deposits of natural persons are covered in full up to the coverage limit, whereas deposits of non-households are covered only up to 90% of the limit, where the maximum coverage is calculated per depositor per institution (i.e. two or more accounts of the same person in one bank is treated like a single deposit). Unlimited coverage never existed in Austria.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); Kyei (1995).

Bahamas. (*Protection of Depositors Act*, *Deposit Insurance Fund*) The Deposit Insurance Fund and the Deposit Insurance Corporation were established in November 1999 after the passing of the Protection of Depositors Act in September 1999. The scheme is legislated by the government and administered by a Board of Management of six members appointed by the Minister of Finance. Membership is mandatory. Domestic deposits in Bahamian dollars including saving and checking accounts, certificates of deposit, guaranteed investment certificates, travelers checks, money orders, and certified drafts of checks are covered up to 50,000 Bahamian dollars, which has not changed since establishment. The coverage limit is applied per depositor per institution and coverage was never unlimited. There is no co-insurance. The scheme is privately funded by flat rate premiums fixed at 120 of 1% assessed on insured deposits.
Sources: Authors' Survey of Deposit Insurers; IADI Survey: Bahamas (2003).

Bahrain. (*Deposit Protection Scheme and Deposit Protection Board, Resolution No. 3*) The deposit protection scheme of Bahrain came into effect in November 1993. The scheme has joint administration and ex-post funding. Both resident and non-resident deposits with Bahrain offices of full commercial bank are covered. The coverage is extended to the lesser of BD 15,000 and three quarters of the total eligible deposits of the depositor in the liquidated commercial bank. The scheme extends coverage to both local and foreign currency deposits. The excluded deposits are; government, illegal, inter-bank, deposits of affiliates, shareholders, directors and officers of the banks.
Sources: Bahrain Monetary Agency (2004), "Deposit Insurance Scheme" http://www.bma.gov.bh/cms/index.jsp?action=article&ID=37; Garcia (1999).

Bangladesh. (*Deposit Insurance Fund, Deposit Insurance Ordinance 1984*) The deposit insurance scheme of Bangladesh was established in 1984. The system excludes the deposits of domestic and foreign governments, banks and other financial institutions. Deposits in foreign currencies are not covered. All scheduled banks are obligated to be members of the scheme and pay a premium on their deposits at a rate of 0.5%. The system is jointly administered and financed. The agency's finances are co-mingled within the central bank.
Sources: Asiatic Society of Bangladesh (2004), "Bangladesh Bank" http://banglapedia.search.com.bd/HT/B_0153.HTM; Garcia (1999); Kyei (1995).

Belarus. (*The Guarantee Fund for the Protection of Deposits by the Population*) The deposit insurance system in Belarus was established in 1996 and went through several revisions since then. In 1998, the government promised full guarantees for banks authorized to provide service to government programs. Then they were taken under the supervision of the National Bank of Belarus (NBB) in 2000. In 2001 NBB issued further rules about insurance for ruble and foreign currency deposits in non-authorized banks. As of 2003 the equivalent of USD 2000 (per person per bank) were fully covered under the insurance scheme, whereas 80% coverage was provided for the next USD 3000 (that is from USD 2000 to USD 5000). Different groups of banks receive different treatment. For example, two large authorized banks do not pay insurance premiums to the Guarantee Fund and their deposits are implicitly covered by the government. On the other hand, the group of banks other than those "authorized" by the government are subject to the coverage limit indicated and are covered by the Guarantee Fund only.
Sources: Barth, Caprio and Levine (2001); Research Center of the Institute for Privatization and Management (2003), "Proposals for Further Development of the Deposit Insurance System in Belarus," Paper PP/2/03.

Belgium. (*Rediscount and Guarantee Institute, Royal Order 175 and March 1982 Legislation*) Before 1995 there were two separate funds (one for banks and one for private savings institutions) that were managed by the institute. Membership was not mandatory. After the changes made in 1995, all institutions are required to participate in the system and there is now only a single fund that covers all credit institutions. In 1995 the coverage limit of 500,000 Belgian Francs was changed to ECU 15,000, which was later replaced by a limit of EUR 20,000 in year 1999. If the funds' liquid assets fall below a critical level, the premiums paid by the banks can be raised by a maximum of 0.04%. The state can provide a limited guarantee.
Sources: Bruyneel and Miller (1995), "Belgium Implements Deposit Guarantee-Scheme," *International Financial Law Review*, London; Garcia (1999); Kyei (1995).

Bolivia. (*Fund for Financial Restructuring*) The deposit insurance scheme in Bolivia was founded in December 20, 2001. It is governed by the Financial Restructuring Fund that acts as a deposit insurer. Membership is compulsory by all financial institutions and until 2005 the Central Bank was the responsible party before the Fund gets fully capitalized. The premiums are proportional to private sector deposits. Before 2005 the deposits were covered up to 50 percent of the privileged obligations, although there does not exist a maximum amount yet. For example, in terms of the order of obligations, private sector deposits, judicial deposits, and other obligations to the private sector come in first priority. The coverage is extended to foreign currency deposits as well.
Source: Ioannidou, Vasso P., and Jan de Dreu (2004), "The Impact of Explicit Deposit Insurance on Market Discipline," mimeo, Tilburg University; World Bank Staff.

Bosnia-Herzegovina. (*Deposit Insurance Agency of the Federation of Bosnia and Herzegovina*) The deposit insurance scheme was established in 1998 by the Law on Deposit Insurance published in the Official Gazette No. 41/98. The system is legislated and administered by the government. The membership to the scheme is mandatory and banks need to pay 0.3% (0.5% until July 2001) of total deposits per year as insurance premiums on a quarterly basis. The deposits are covered up to KM 5000 without any coinsurance and they are granted on a per depositor per institution basis. The scheme is privately funded and it extends to foreign currency and inter-bank deposits as well.
Sources: Authors' Survey of Deposit Insurers; IADI Survey: Bosnia and Herzegovina (2002).

Brazil. (*Fundo Garantidor de Creditos-FGC, Resolutions 2197, 3024*) FGC commenced its operations in November 1995. The scheme is privately administered. Membership to the system is mandatory. The banks pay a premium of 0.3 % of the insured deposits. The system does not extend coverage to inter-bank deposits and the coverage limit is set at Reais 20,000. The EDIS was revised in 2002 but the coverage was left unchanged.
Sources: FGC (2004); Garcia (1999); Talley, Samuel H. (1998), "An Advisory Report on Brazil's Banking Sector Safety Net and The Role of Deposit Insurance," World Bank Advisory Report, Washington, DC: World Bank.

Bulgaria. (*Law on Bank Deposit Guaranty, Deposit Insurance* Fund) The deposit insurance scheme in Bulgaria was established in January 1996 based on Directive 94/19/EC of 1994. At the time, only deposits of physical persons were insured up to EUR 2,500. Due to the failure of 15 banks in the 1996 financial crisis, a blanket guarantee was applied to individual deposits and 50% repayment on company deposits. The Bulgarian Deposit Insurance Fund was established in early 1999. The coverage was raised to BGN 6,900 (EUR 3,528) in April 1998, to BGN 10,000 (EUR 5,113) in 2001 and finally to BGN 15,000 (EUR 7,670) in 2002. The scheme is jointly administered and the membership is mandatory. Insider deposits and deposits paying preferential interest rates are not covered. If the funds' resources are not adequate, banks can be called to contribute an advance premium of 1.5% of insured deposits. The co-insurance was abolished in 2001. The fund has the right to borrow, including from the government in the last resort to receive donations and foreign assistance.
Sources: Central European (1998), "Bulgaria Introduces Law on Bank Deposits," May, London; Authors' Survey of Deposit Insurers; Garcia (1999); State Gazaette of Bulgaria (1998), "Law on Bank Deposit Guaranty-Bulgaria", State Gazette issue 49, 29 April 1998, final amendment issue 118 of 2002.

Cameroon, Chad, Central African Republic, Gabon, Equatorial Guinea, and Republic of Congo. A proposal was drafted in 1999 but only ratified by two out of these six CEMAC countries. Thus, we do not classify these countries as having deposit insurance systems (unlike Demirgüç-Kunt and Sobaci (2000) and Garcia (1999)). These African countries share a common central bank. The features of the proposed system are as follows: mandatory membership, joint administration, a permanent fund in place, exclusion of deposits of foreign currencies. The assessment bases for the premiums are deposits and non-performing loans, and the premium rate is 0.15% of deposits plus 0.5% net non-performing loans. When necessary, budgetary resources will be available from member countries.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999).

Canada. (*Canada Deposit insurance Corporation, Deposit Insurance Corporation Act of Canada*) The deposit insurance scheme in Canada was established in 1967 and the initial coverage was $Can 20,000. In 1983 the deposit coverage was raised to $Can 60,000, while retirement accounts and deposits held in trust received separate protection with an additional $Can 60,000. The scheme applies to the aggregate amount held per depositor per institution. The system is jointly administered and the membership is compulsory. The covered deposits are savings and demand deposits, term deposits such as guaranteed investment certificates and debenture issues by loan companies, money orders, drafts, checks, and traveler's checks issued by member institutions. The fund can borrow from the markets and the government, but is charged at private market rates.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); Kyei (1995).

Chile. (*Superintendent of Banks, Banking Law*) The DIS of Chile was established in 1986. The system does not have a permanent fund in place. The Chilean Central Bank guarantees 100% of the demand deposits in full, and 90% of the household savings and time deposits up to 120 Unidades de Fomento (1 Unidad de Fomento= US$ 24 as of May 2003) per person. The central bank is responsible for demand deposits. Banks with demand deposits in excess of 2.5 times the capital reserves are required to maintain a 100% marginal reserve requirement in short-term central bank or government securities lined to the central bank. The coverage is extended to foreign currency deposits as well and there is no distinction regarding the type of depositor.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); IADI Survey: Chile (2003); Kyei (1995).

Colombia. (*Financial Institution Guarantee Fund, Banking Law 117 of 1985*) The deposit insurance scheme of Colombia was established in 1985. The scheme is government legislated and administered and membership to the system is mandatory. Deposits in foreign currencies are excluded, whereas inter-bank deposits are not. The coverage is per depositor per institution up to 20 million Colombian pesos with a 25% co-insurance. The premium rate is currently 0.5% on all deposits which will go down to 0.3% after January 2007.
Source: Authors' Survey of Deposit Insurers; IADI Survey: Colombia (2002).

Croatia. (*State Agency for Deposit Insurance and Bank Rehabilitation*) The deposit insurance scheme of Croatia was established in 1997. Even though the system is privately administered, some decisions must be approved by the central bank. Inter-bank deposits are not covered. The scheme extends coverage to deposits in foreign currency (except to foreign currency deposits placed prior to 1993 which carry a government guarantee). The fund may borrow from the central bank.
Sources: Garcia (1999); Kyei (1995).

Cyprus. (*Deposit Protection Scheme, Central Bank of Cyprus*) The deposit protection scheme of Cyprus came into effect on September 1st, 2000. It is jointly administered by the Central Bank and Management Committee. Membership is mandatory for the scheme and it covers all deposits except entities or persons against which criminal proceedings have been instigated or which a confiscation order has been made. The coverage limit is 90% of the Cyprus pound equivalent of EUR 20,000 per depositor per institution.
Source: IADI Survey: Cyprus (2003).

Czech Republic. (*Deposit Insurance Fund, Act No 156, 1994*) The Deposit Insurance Fund of the Czech Republic was established in December 1994. It is government legislated and privately administered. The insurance is granted for savings and checking accounts, certificates of deposit and foreign currency deposits (promissory notes, inter-bank deposits and other securities are not covered). The scheme covers 90% of all insured deposits up to the equivalent of EUR 25,000 per depositor per institution. Membership to the Fund is compulsory and the premium rates are 0.1% of all insured deposits including accrued interest for banks; whereas 0.05% for building savings banks. With regards to the government participation in funding, a law (no 156/1994) mandates that the state will provide 50% of the funds needed for compensation of depositors by the DIF. The central bank and the government would equally make loans to cover any shortfall in funding.
Sources: Garcia (1999); IADI Survey: Czech Republic (2003); Institute of International Bankers (1997), "Global Survey 1997"; Kyei (1995).

Denmark. (*Deposit Guarantee Fund, Act 850, 1987; Order 118, 1988*) The Guarantee Fund of Denmark was established in 1987. The system is government legislated and privately administered. The fund can borrow from banks with a possible guarantee from the government. The maximum coverage limit of DKK 250,000 was raised to DKK 300,000 (about EUR 40,000) effective September 1995. The fund covers registered deposits net of loans and other liabilities of the depositor vis-à-vis the bank per depositor per institution and membership to the fund is mandatory. Certain accounts established according to law such as pension accounts, children's saving accounts and attorneys' client accounts are covered in full.
Sources: Authors' Survey of Deposit Insurers; IADI Survey: Denmark (2002); Institute of International Bankers (1996), "Global Survey 1996".

Dominican Republic. (*Savings Account Insurance, National Housing Bank Law*) The deposit insurance scheme of Dominican Republic was established in 1962 and it only covers the savings and loan associations. Membership to the system is not compulsory. The system is jointly administered and funded. The government can fund the DIS through savings and loan associations. Foreign currencies are covered, whereas inter-bank deposits are not.
Sources: Garcia (1999); Kyei (1995).

Ecuador. (*Deposit Guarantee* Agency) The DIS in Ecuador was established on December 3rd, 1998 after a major financial crisis and failure of the biggest bank Filanbanco. The system is government legislated and administered. It excludes the deposits of owners, current or recent directors or managers. The fund can borrow, but it is not clear from whom. Both inter-bank and foreign currency deposits are covered. The coverage was initially full and in 2001 it was changed to four times the per capita GDP, which was still in existence as of 2003.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); IADI Survey: Ecuador (2003).

El Salvador. (*Deposit Guarantee Institution, Bank Law 1999*) The Guarantee Institution of El Salvador was established in November 1999 and the system is government legislated and administered. Initial funding was provided through the central bank which is later augmented by premiums collected at a 0.1% annual rate on total deposit liabilities from the members. The membership is mandatory and the coverage limit was an equivalent of $6,700 (approximately Colon 58,424) as of 2003. The previous limits were $4000 (Colon 35,000) in 1999 and $6286 (Colon 55,000) in 2000. Only savings and checking accounts are eligible for coverage.
Sources: Authors' Survey of Deposit Insurers; IADI Survey: El Salvador (2003).

Estonia. (*Deposit Guarantee Fund*) The deposit insurance system of Estonia was established in October 1998. The system initially guaranteed 20,000 Estonian kroons (EEK), which was raised to EEK 40,000 as of January 1, 2000. The Guarantee Fund Act entered into force on July 1st, 2002 and set coverage levels at EEK 40,000 initially to be raised to EEK 100,000 on December 31st, 2003, then to EEK 200,000 on December 31st, 2005 and EUR 20,000 starting on December 31st, 2007 the latest. The initial funding was granted by the government and banks paid EEK 50,000 at the start-up. The fund can borrow without a government guarantee or ask the government to borrow a limited amount on its behalf. The types of deposits not covered are deposits in foreign currencies, deposits of insiders, money-launderers, governments at all levels, larger businesses, financial institutions including insurance companies, other members of the same corporate group, and those that pay "substantial higher rates". The coverage amount is calculated per depositor per institution.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); U.S. Embassy Reports (1998), "Estonia – April 1998 Economic Highlights", CEEBICnet, April.

Finland. (*Deposit Guarantee Fund, Act on Credit Institutions*) The DIS of Finland was established in 1969. In 1998 it was revised in accordance with the EU directives. Before the changes, deposits were covered in full. In the new system a maximum limit of 150,000 FIM was set for the coverage limit. Currently, the coverage is up to EUR 25,000 per depositor per institution. The scheme is privately administered by the member banks in compliance with the rules prescribed by the Ministry of Finance and supervised by the FSA. Foreign currency deposits are covered. Deposits of the central bank and credit institutions are excluded. The

government and central bank have borne losses in the past. Membership to the Fund is mandatory and the premium has a fixed 0.05% fixed part and a variable part based on solvency which can be at maximum 0.25%.
Sources: Garcia (1999); IADI Survey: Finland (2002); Institute of International Bankers (1998), "Global Survey 1998"; Kyei (1995); Valori, Veli-Pekka, and Jukka Vesala (1998), "Reform of the Finnish Deposit Guarantee Scheme", Bank of Finland Bulletin, Vol. 72, No.3, March.

France. (*Fonds de Garantie des Depots*) The DIS of France was established in 1980 and revised in 1986. It is an unfunded scheme in which the banks contribute to the fund on demand. There are separate schemes for commercial banks, and for mutual savings and cooperative banks. The system is privately administered and jointly funded. Debt securities insured by institutions, deposits of the central government, insiders, affiliated companies and money launderers are excluded from coverage. Initially, coverage was at 200,000 FF and after 1986 it was raised to 400,000 FF. In 1999, according to regulation 99-05, the limit was finally set at EUR 70,000 per depositor per institution. Coverage extends to foreign deposits as well and there is no co-insurance.
Sources: Authors' Survey of Deposit Insurers; Fonds de Garantie des Depots (1999), Regulation 99-05, http://www.garantiedesdepots.fr/spip/reglements_99_05.php; Garcia (1999).

Germany. (*Deposit Security Fund, Savings Bank Security Fund and Credit Cooperation Security Scheme, Federal Association of German Banks*) The first nation-wide joint fund operated by private banking sector in Germany was established in 1966 by the Federal Association of German Banks. The fund protected savings, salary, and pensioners' accounts up to DM 10,000 and other sight and time deposits of natural persons up to DM 20,000. In 1974, the coverage was enlarged to cover up to 30% of the equity capital per depositor, which is still binding in terms of the private Fund. There are separate schemes by the German Savings Bank, Giro Association, and credit cooperative banks (the latter dates back to 1930s to the aftermath of the Great Depression). These guarantee funds aim at protecting the institutions themselves and hence, provide indirect protection to depositors as a by-product. In 1994, a voluntary deposit protection fund was established by the public-owned banks. In line with the transformation to EC Deposit Guarantee Directive, the official binding statutory deposit protection has been limited to 90% of EUR 20,000 for commercial banks, which co-exists with the voluntary funds by various banking associations. In the official and voluntary deposit protection schemes, coverage amounts are calculated as per depositor.
Source: Authors' Survey of Deposit Insurers.

Gibraltar. (*The Deposit Guarantee Scheme Ordinance*) The deposit insurance scheme in Gibraltar was established in 1998 in line with the insurance arrangements in the EU via directive 94/19/EC. It is jointly administered and privately funded, where the membership is mandatory. There is no permanent fund in place. The banks make ex-post contribution to the fund and pay administrative expenses on a regular basis. The coverage is the lesser 90% of all qualifying deposits or 18,000 British pounds (or Sterling equivalent of EUR 20,000, whichever is the greater).
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); Gibraltar Deposit Guarantee Board (1998), "Deposit Guarantee Scheme Ordinance", http://www.gdgb.gi/scheme.htm.

Greece. (*Hellenic Deposit Guarantee Fund, Law 2832/2000*) The deposit guarantee scheme of Greece was established in 1995 by Law 2324/95 which was later amended by 2832/2000. It is administered jointly. The board has eight members; three members from the Bank of Greece, five members from the Hellenic Bank Association with a participant from the Ministry of Finance. If the fund resources are not sufficient to meet the depositors' claims, members may be called upon to pay an additional contribution that can not exceed 300% of the last annual contribution. The premiums paid by the members are determined by the following brackets: 0.5 million GRD – 1.25%, 51-250 million GRD – 1.20%, 251-750 million GRD – 1.175%, 751-1750 million GRD – 0.205%, 1751 million GRD and above – 0.025%. Inter-bank, insider, illegal and central government deposits are not covered. Membership is mandatory by the commercial and cooperative banks and the Fund covers savings, checking and foreign currency deposits. The coverage limit is EUR 20,000 per depositor per institution with no co-insurance.

Sources: Garcia (1999); Hellenic Deposit Guarantee Fund (2000), "Law 2832/2000", http://www.hdgf.gr/binary/hdgf_Law.pdf; IADI Survey: Greece (2002); Institute of International Bankers (1996), "Global Survey 1996"; Kyei (1995).

Guatemala. The deposit insurance scheme in Guatemala was established in 1999 and is publicly governed. A private fund is employed although the government may make temporary contributions with the provision of repayment. The premium rates are set at 1% plus 0.5% when the fund falls short of the target. The coverage limit is $2,800 per depositor which can be adjusted to cover between 90 to 95% of the accounts.
Source: Garcia (2000).

Honduras. The deposit insurance scheme of Honduras was established in 1999 as a response to a major banking crisis and under the Temporary Law of Financial Stabilization, all bank deposits received a full ex-post guarantee which remained valid until 2002. After September 2003 the government insurance covered insured deposits up to 165,000 lempiras ($9,500). The scheme is publicly administered and jointly funded requiring premiums up to 0.25% of insured deposits.
Sources: Authors' Survey of Deposit Insurers; Garcia (2000).

Hong Kong. (*Hong Kong Monetary Authority, Companies Ordinance*) There is no explicit deposit insurance scheme in Hong Kong but is soon expected to be introduced. The coverage limit of the proposed scheme is HK$ 100,000 (or $12,820) per depositor per institution. An alternative scheme where small depositors receive a priority treatment is currently in place based on Companies Ordinance that took effect in 1995. The priority limit is the first HK$ 100,000 of net deposits.
Sources: Authors' Survey of Deposit Insurers; IADI Survey: Hong Kong (2003).

Hungary. (*National Deposit Insurance Fund, Act XXIV of 1993*) The deposit insurance fund of Hungary was established on 31st March, 1993. The system is government legislated and privately administered. Members of the board of directors are, the president of the National Bank of Hungary, the administrative secretary of the state of the Ministry of Finance, the president of inspections, two persons delegated by the interest-representing organizations of financial institutions, and the managing director of the DIF. Deposits of government, insiders, professional investors, money launderers, and other banks are excluded from coverage. The government can guarantee fund borrowing from the central bank or private markets if requested. Membership to the Fund is compulsory. The coverage is mainly extended to savings accounts, certificates of deposit and foreign currency deposits. However, only currencies denominated in EUR or other OECD countries are insured. The coverage limit was initially HUF 1 million (approximately $3700), which was raised to HUF 3,222,222 on January 1st, 2003 and to HUF 6,555,555 on May 1st, 2004. The maximum coverage is calculated per depositor per institution.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); IADI Survey: Hungary (2003); Kyei (1995); and Ministry of Finance of Hungary (1993), "Act on National Deposit Insurance Fund".

Iceland. (*Deposit Insurance Fund for Savings Banks; Deposit Insurance Fund for Commercial Banks, Acts 86, 87/1985; Depositors' and Investors' Guarantee Fund 98/1999*) The deposit insurance system of Iceland was first established in 1985. There were separate schemes for commercial banks and savings banks which were monitored by the supervisory agency. The fund for the banks had a member of the government on its board. Even though the coverage in principle was full, the system was considered to have a co-insurance mechanism due to the fact that above the minimum coverage limit of ECU 20,000, the actual compensation of depositors were determined according to the resources of the fund, which received no public support. Act 98/1999 established the new scheme and the Fund in accordance with the EU directives since Iceland is a member of the European Economic Area (EEA). The new fund took over the assets of the previous two funds, and it is both privately established and administered. The Central Bank provides such services as accounting and bookkeeping as well as securing valuable documents. The membership to the Fund is mandatory. The coverage limit was ISK 1,700,000 which is tied to the EUR exchange rate as of January 5th, 1999 (approximately EUR 21,000) and hence, is worth ISK 2,091,000 as of 2003. Coverage is extended per depositor.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); IADI Survey: Iceland (2003); Kyei (1995).

India. (*Deposit Insurance and Credit Guarantee Corporation (DICGC), DICGC Act, 1961*) The DIS of India was established in 1962 following two bank failures in 1961. Initially the system covered exclusively the commercial banks. In 1968 cooperative bank with a minimum size operating in states having pertinent legislation was included in the system. In 1975 coverage was extended to rural banks as well. The coverage limits have been changed in time as follows: initially Rs 1,500; Rs 5,000 in 1968; Rs 10,000 in 1970; Rs 20,000 in 1976; Rs 30,000 in 1980, and Rs 100,000 since May 1st, 1993. The system is administered officially. Certificates of deposits, government, inter-bank, and illegal deposits are not covered.
Sources: Deposit Insurance and Credit Guarantee Corporation-India (2004), http://www.dicgc.org.in/; Garcia (1999); Kyei (1995); Talley and Mas (1990).

Indonesia. There exists a full blanket guarantee in Indonesia since 1998 in response to the banking crisis. The government is planning to offer an explicit, limited, and self-funded deposit insurance scheme.
Source: International Monetary Fund (1998), "IMF Bail Outs: Truth and Fiction," IMF Factsheet, January, Washington, DC: International Monetary Fund.

Ireland. (*Deposit Protection Account, Central Bank, Central Bank Act, 1989*) The Irish DIS was established in 1989. The system is administered officially. Public funding may be available through central bank and government support with parliamentary approval. Initially 80% of the first 5000 pounds, 70% of he next 5000 pounds, and 50% of the next 5000 pounds was covered. In July 1995 the coverage limit was set at ECU 15,000. Currently it is at 90% of EUR 20,000. The system does not extend coverage to certificates of deposits, deposits of major owners and senior managers, and money launderers.
Sources: Garcia (1999); Institute of International Bankers (1996), "Global Survey 1996"; Kyei (1995).

Isle of Man. (*Financial Supervision Commission, Banking Business Regulations-Compensation of Depositors, 1991*) The scheme came into effect on August 14th, 1991 and it is officially legislated and administered. The maximum coverage per depositor per institution is the lesser of 15,000 pounds or 75% of the deposit amount. The insurance covers saving and checking accounts, certificates of deposit and foreign currency deposits. There is no permanent fund and the funding required by participants in the event of a claim is the greater of 25,000 pounds or the sum of 0.125% of the average sterling and foreign currency deposits subject to a maximum of 250,000 pounds.
Sources: Authors' Survey of Deposit Insurers; IADI Survey: Isle of Man (2002).

Italy. (*Inter-bank Deposit Protection Fund*) The DIS of Italy was established in 1987 and in 1996 the EU Directive 94/19 was accepted. There were separate systems for banks and cooperative institutions initially. Even though the scheme is privately established and administered, we consider it to be jointly administered, due to the fact that most decisions must be approved by the central bank. Criminal, government, insider, inter-bank and bearer deposits are not covered. The Bank of Italy can make low-interest rate loans to facilitate a large pay-out. The coverage has been ITL 200 millions per depositor since establishment, which corresponded to EUR 103,291 as of 2003.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); IADI Survey: Italy (2003); Kyei (1995).

Jamaica. (*Deposit Insurance Corporation, Deposit Insurance Act 1998*) The deposit insurance system of Jamaica was established in 1998. It is government legislated and administered. Membership to the scheme is mandatory. Insurance coverage limit was initially J$ 200,000 and was raised to J$ 300,000 after July 2001. Coverage is calculated per depositor per institution and it extends to foreign currency deposits as well.
Sources: Authors' Survey of Deposit Insurers; IADI Survey: Jamaica (2003).

Japan. (*Deposit Insurance Corporation-DIC, Deposit Insurance Law*) There are two separate deposit insurance schemes in Japan; one for commercial and Shinkin banks, credit cooperatives and labor and credit associations, and another for agricultural and fishery cooperatives. The first scheme covers demand and time deposits

in domestic currency. The coverage was 1 million yens in 1971, 3 millions in 1974, and 10 millions in 1986 covering the principal only; and, it became 10 millions for principal plus interest in 2001. Due to a law amendment in 2002, special deposits for settlement and payment uses have been fully covered. The blanket guarantees were offered for current, ordinary and special deposits in 1996 as well again as a temporary measure. The coverage is otherwise per depositor per institution. The system is government legislated and administered. The government and the central bank provided the initial capital. The fund can borrow from the central bank, and the government can guarantee the DIC's debt. Membership to the Corporation is mandatory. Between 1996 and 2000, banks were required to pay a special premium of 0.0036% in addition to their regular rate of 0.0048%. As a result of an amendment to the Deposit Insurance Law in February 1998, the government allocated 17 trillion yens to a special account in the DIC.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); IADI Survey: Japan (2003); Kyei (1995); Oxford Analytica Brief (1997), "Japan: Stimulation Package," December.

Jordan. (*Deposit Insurance Corporation*) The DIC of Jordan was established in September 2000 and it is government legislated and administered. Membership to the scheme is compulsory and insurance has been provided up to JD 10,000 since establishment. The coverage is calculated per depositor per institution. Insurance premiums are assessed on a flat basis with a rate of 0.25%.
Sources: Authors' Survey of Deposit Insurers; IADI Survey: Jordan (2002).

Kazakhstan. (*Deposit Insurance Fund*) The Deposit Insurance Fund of Kazakhstan was established in November 1999. The system is government legislated and administered. The National Bank of Kazakhstan provided the initial capital of KZT 1 billion for the Fund and its membership became compulsory after January 2004. Member banks pay a flat rate of 0.25% for two years after they enter the system and 0.16% from then on. In case of insufficiency, the Fund can borrow from the National Bank and the government. The coverage limit is KZT 400,000 (about $3000 as of 2003) per depositor per bank and before 2003 it was KZT 200,000. Foreign currency deposits are also covered.
Source: IADI Member Profiles: Kazakhstan Deposit Insurance Fund; Kazakhstan Deposit Insurance Fund (2004), "Introduction to Deposit Insurance Fund", http://www.kdif.kz/index.php?page=1&go=info&lang_chose=en

Kenya. (*Deposit Protection Fund Board, Banking Act No. 17, 1985*) The DIS of Kenya was established in 1985 following four bank failures and it became operational in 1986. The scheme is administered officially and funded jointly. The fund can borrow from the central bank. The board is chaired by the governor of the central bank. The Treasury is represented by a permanent secretary.
Sources: Central Bank of Kenya (2004), "Deposit Protection Fund Board", http://www.centralbank.go.ke/dpf/dpfindex.html; Garcia (1999); Kyei (1995).

Korea. (*Korea Deposit Insurance Corporation, Bank Deposit Insurance Act 1995, Law no. 5042, the BDIA*) The Deposit Insurance Corporation of Korea was established in June 1996 and became operational in January 1997. The scheme is government legislated and privately administered. The coverage limit was initially set at 20 million WON but between November 1997 and December 2002, in response to the financial crisis, the deposits were covered in full. Demand deposits, savings and time deposits, installment deposits and mutual installment deposits, and money in trust with a principal were protected accordingly by the scheme. The types of institutions covered are domestic commercial banks, specialized banks, foreign bank branches, development institutions, and credit unions. As of 2003, the coverage limit was 50 million won per depositor per institution. The KDIC is legally authorized to borrow from the government or central bank with the approval of the ministry of finance.
Sources: Garcia (1999); IADI Survey: Korea (2003); Korea Deposit Insurance Corporation (2004), "Introduction to Korea Deposit Insurance Corporation, http://www.kdic.or.kr/english/; Ko, Don Wong (1997), "Korea Introduces Banks Deposit Insurance Scheme," *International Financial Law Review*, London, April; Kyei (1995).

Latvia. (*Law on guarantees for deposits of natural persons)* The DIS of Latvia was established in 1998. It is administered officially. Insider deposits and accounts in bank already declared bankrupt or insolvent, or in liquidation proceedings are not covered. The initial coverage limit was 500 Lats. In accordance with the EU standards, this amount will be gradually increased up to 13,000 Lats by the year 2008 according to the following schedule: 500 Lats, until December 31, 1999; maximum 1,000 Lats until December 31 2001; maximum 3,000 Lats until December 31, 2003; maximum 6,000 Lats until Dec 31, 2005; maximum 9,000 Lats until Dec 31, 2007; maximum 13,000 Lats after Jan. 2008. The Bank of Latvia and the government made initial contributions to the fund.
Sources: Bank of Latvia (1998), "Law on Natural Person Deposit Guarantees"; Garcia (1999); Institute of International Bankers (1997), "Global Survey 1997".

Lebanon. (*National Deposit Guarantee Institution, Banque du Liban, Law no. 28/67*) The deposit insurance scheme of Lebanon was established in May 1967. It is administered and funded jointly. The government matches the premiums paid by the banks. The central bank contributed half of the initial capital. The fund can borrow from the central bank. Initially, the scheme extended coverage only to deposits denominated in Lebanese pounds up to LL 30,000 (approximately $10,000 at the time) per depositor per bank. The insurance coverage limit was then raised to LL 250,000 (approx. $2,874) in 1986; to LL 1 million (approx. $1,887) in 1988 and to LL 5 million ($5,688) in 1991. The level remained the same since then, corresponding to $3,3317 as of 2003. According to a transitional law lasting from the end of 1991 to the end of 1998, deposits in foreign currencies were also covered up to LL 5 million.
Sources: Garcia (1999); Kyei (1995); Banque du Liban (2004), "National Deposit Guarantee Institution", http://www.bdl.gov.lb/bfs/bfsparticipants/SB/ndgi.htm.

Liechtenstein. (*Financial Services Authority, Liechtenstein Banking Act of 1992, Art.7; Liechtenstein Bankers Association*) In accordance with the EU directives Liechtenstein passed a banking law in 1992 requiring banks to provide guarantees for deposits and investments lodged in them. As a privately administered scheme, Liechtenstein Bankers Association started up the Liechtenstein Bankers Association Deposit Guarantee and Investor Protection Foundation. The insurance scheme covers deposits of private customers up to a maximum of EUR 20,000 or its equivalent in other EEA currencies and CHF. Deposits denominated in other currencies are not covered. The Foundation can meet its obligations up to CHF 300 million as constrained by the contractually agreed maximum contribution amounts by member banks.
Source: Liechtenstein Banking Act (1992), "Liechtenstein Banking Act", unofficial translation.

Lithuania. (*Deposit Insurance Fund, Deposit Insurance Law, December 1995*) The deposit insurance scheme of Lithuania was established in 1996 based on a law that was voted in the parliament in December 1995 after the failure of two large and popular banks. It is officially legislated and administered. The government provided the initial capital and is committed to cover any shortfall. Membership to the Fund is mandatory and the premium rate for banks and branches of foreign banks is 0.45% and for credit unions 0.2% of insured deposits. The deposits are covered 100% up to LTL 10,000 and 90% from LTL 10,000 to LTL 45,000 ($16,200 as of 2003) per depositor per institution. Under the new law, the insurance limit is projected to reach a level of EUR 20,000 by 2008.
Sources: Brance, Kammer and Psalida (1996), "Financial Sector Reform and Banking and Banking Crises in the Baltic Countries", IMF Working Paper, Washington, DC: International Monetary Fund; IADI Survey: Lithuania (2002); International Monetary Fund (2002), "Republic of Lithuania: Financial System Stability Assessment, including Reports on the Observance of Standards and Codes on the following topics: Monetary and Financial Policy Transparency, Banking Supervision, Insurance Regulation, and Payment Systems," IMF Country Report No. 02/19, February, Washington, DC: International Monetary Fund.

Luxembourg. (*Deposit Guarantee Association*) The scheme was established in 1989. It is privately administered. There is no permanent fund in place. Banks make ex-post contributions when needed. The coverage limit of LUF 500,000 was raised to 90% of ECU 15,000 in July 1995. Since January 2000, it is set at 90% of EUR 20,000 per depositor per institution. Branches of foreign banks are also members of the system. If a foreign bank is organized under the law of another EU member state, it does not have to participate in the system, but the coverage amount should be equal to that allowed in the Luxembourg system.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); Institute of International Bankers (1997), "Global Survey 1997"; Kyei (1995).

Macedonia. (*Deposit Insurance Fund*) The scheme in Macedonia was first established in 1996 under the name Saving Deposit Insurance Fund Inc. as a joint shareholders' company by the banks and savings houses. In July 2000, a single Deposit Insurance Fund came into force. The scheme is administered and funded jointly by the government and the private sector. The fund can borrow from the central bank or domestic and foreign sources if necessary. Membership to the system is mandatory. Coverage is extended to current accounts and savings deposits of natural persons that are denominated in domestic and foreign currencies. The coverage limits have changed according to the following over time: In 1996, the lesser of 75% of total savings per depositor or Denar equivalent of DM 10,000; in 2000, 100% of deposits up to EUR 1,500 and 90% of EUR 1,500 to EUR 7,500; in 2002, 100% of deposits up to EUR 3,000 and 90% of EUR 3,000 to EUR 10,000; and since May 2003, 100% of deposits up to EUR 10,000 and 90% of EUR 10,000 to EUR 20,000. The coverage is calculated per depositor per institution and banks are charged a flat premium of 0.7% as of 2003.
Sources: IADI Survey: Macedonia (2002); International Monetary Fund (2003), "Former Yugoslav Republic of Macedonia: Financial System Stability Assessment, including Reports on the Observance of Standards and Codes on the following topics: Banking Supervision, Payment Systems, Monetary and Financial Policy Transparency, and Anti-Money Laundering and Combating the Financing of Terrorism," IMF Country Report No. 03/374, November, Washington, DC: International Monetary Fund; Deposit Insurance Fund Skopje (2004), "Deposit Insurance Fund", http://www.fodsk.org.mk/eng/default.asp.

Malaysia. Malaysia introduced a blanket guarantee for depositors in December 1997 which came into force in 1998. The scheme was introduced in response to the financial crisis.
Source: Garcia (2000).

Malta. (*Deposit Guarantee and Investor Compensation Scheme, Financial Services Authority*) The regulation approving the creation of a deposit insurance scheme in Malta became effective on January 3rd, 2003. The participants of the scheme were required to initially contribute LM 10,000 each and over five years were expected to contribute a total of minimum LM 1 million in proportion to their holdings of eligible deposits. Membership is mandatory. The scheme is being developed in accordance with EU standards and coverage limit is therefore set at 90% of a maximum EUR 20,000 per depositor per institution.
Source: Malta Financial Services Authority (2004), "The Depositor Guarantee and the Investor Compensation Scheme", http://www.mfsa.com.mt/mfsa/default.asp.

Marshall Islands. (*Federal Deposit Insurance Corporation-FDIC, Banking Act*) The scheme in Marshall Islands was established in 1975. Membership to the system is voluntary. The system is funded by the contributions of the members only. It is administered officially. The coverage limit is set at US$ 100,000.
Sources: Garcia (1999); Kyei (1995).

Mexico. (*Bank Savings Protection Fund, Credit Institutions Law; Bank Savings Protection Institute, Bank Savings Protection Law*) The deposit insurance scheme of Mexico was established in 1986. It is administered officially. In 1990, Bank Savings Protection Fund was created as a trust within the Central Bank providing unlimited guarantee to all lawful banks. The agency's assets were depleted and the trust had to issue government-backed debt after the 1995 banking crisis. In 1999, Bank Savings Protection Institute was established and the new scheme took on a seven stage transition period from blanket to limited coverage. A coverage limit first started to apply in 2003 at 32,262,340 Mexican pesos (equivalent of 10 million UDIs or investment units which is a monetary unit indexed to price level). In 2004 the maximum coverage dropped to 5 million UDIs (16,762,350 Mexican pesos) and was planned to go down to 400,000 UDIs (1,365,979 pesos) in 2005. The coverage amount is calculated per depositor per institution. Membership is compulsory for all banks and the premiums are assessed as minimum 0.4% of a proxy of total bank liabilities. In the 1999 system the rate was 0.3% with a 0.5% maximum plus 0.7% premium when necessary.
Sources: Authors' Survey of Deposit Insurers; IADI Survey: Mexico (2003).

Micronesia. (*Federal Deposit Insurance Corporation-FDIC, Banking Act*) The scheme of Micronesia was established in 1963. It is administered officially. Membership to the system is voluntary. The coverage limit is set at US$ 100,000. The fund has borrowed from the Central Bank and the Ministry of Finance.

Sources: Garcia (1999); Kyei (1995).

Netherlands. (*Collective Guarantee Scheme*) The scheme of Netherlands was established in 1978. There is no permanently maintained fund. The banks make ex-post contributions when needed. Ex-post assessments are made case-by-case based on several items of data reported to the central bank. Assessed bank's portfolio is compared to the portfolio of the failed bank. The contribution amounts are determined after consultation with the Bankers Committee. The central bank provides interest-free bridge financing. Deposits of large corporations, other banks, insurance companies and insiders are not covered. Deposits of small enterprises and small foundations along with the deposits of households are protected. Covered types of accounts are current and savings accounts, and bank-registered debt instruments. Deposits at branches of foreign banks established in other EU states are not covered. The coverage limits have historically taken the following values: HFL 25,000 in 1978, HFL 44,000 in 1996 and finally EUR 20,000 since 1998. There is no co-insurance.
Sources: Garcia (1999); Garcia, Gillian, and Henriette Prast (2003), "Depositor and Investor Protection in the EU and the Netherlands: A Brief History," *Journal of European Economic History*, 2003(2); Institute of International Bankers (1996), "Global Survey 1996"; Kyei (1995).

Nicaragua. The deposit insurance scheme of Nicaragua was established in 2001. It provides coverage of up to US$ 20,000 per depositor per institution. The system is officially legislated and administered. Membership to the fund is mandatory.
Source: Barth, Caprio, and Levine (2001).

Nigeria. (*Nigerian Deposit Insurance Corporation-NDIC, Act No. 22*) The scheme of Nigeria was established in 1998 by the military government. The federal government made an initial contribution to the fund and it can still extend loans. 40% of the Corporation's equity is owned by the Federal Ministry of Finance and Economic Development Inc., and the remaining 60% is held by the Central Bank of Nigeria. Both the Central Bank and the Ministry of Finance are represented in the board which is chaired by the governor of the Central Bank. All categories of traditional deposits are covered except insider deposits, and deposits that serve as collateral for loans. The coverage per depositor has been N 50,000 (about $366 as of 2003). There is no co-insurance and membership to the fund is mandatory. The premiums are assessed at a flat rate of 0.94%.
Sources: World Bank Staff Report (1992), "Deposit Insurance in Nigeria: A Critical Appraisal"; Garcia (1999); IADI Survey: Nigeria (2003); Kyei (1995); Talley and Mas (1990).

Norway. (*Deposit Guarantee Fund*) The scheme of Norway was established in 1961. There are separate funds for commercial banks and savings banks. Both of these funds are privately administered and jointly funded. In Norway there was actually a guarantee fund for savings banks with voluntary membership in 1921 which became obligatory in 1924, whereas a guarantee fund for commercial banks was first introduced in 1938. However, Norway's guarantee fund at the time is not considered a pure deposit insurance scheme so they had no official explicit deposit insurance until 1961. The government and central bank have borne losses in the past. There are seven members on the boards of the funds. One of the members is from the Central Bank, and the other is from the Banking and Securities Commission. Deposits of other banks and deposits of companies in the same group with the depository bank are excluded. The Commercial Banks Guarantee Fund provided unlimited coverage between 1962 and 1997. Since 1997, the maximum coverage amount allowed has been NOK 2 millions per depositor per institution.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); Gerdrup, Karsten R. (2003), "Three Episodes of Financial Fragility in Norway since the 1890s," BIS Working Paper No. 142, Basel: Bank for International Settlements; IADI Survey: Norway (2003); Kyei (1995).

Oman. The scheme of Oman was established in 1995. It is officially administered and jointly funded. The central bank matches half of the member banks' premium contributions. The fund can borrow from the government, central bank and the member banks. Deposits of significant shareholders, directors and senior managers, illegal deposits and the deposit of auditors, parent, subsidiary and affiliated companies are excluded. The coverage is up to RO 20,000 or 75% of net deposits, whichever is less. The premiums are assessed at a rate of 0.2% but can range from 0.1% to 0.3% over time.

Source: Garcia (1999); Garcia (2000).

Paraguay. The deposit insurance scheme of Paraguay came into force in 2003. The coverage limit was set at 75 times the monthly minimum salary as of 2003.
Source: Barth, Caprio, and Levine (2001).

Peru. (*Deposit Insurance Fund, Banking Law 1991*) The scheme was established in 1991. It is government legislated and privately administered. The Central Bank and the Treasury have made initial contributions. The Fund may borrow from the Treasury. All types of deposits, except bearer certificates for natural persons and non-profit organizations are covered. The premium is computed based on the maximum amount insured and applies only to deposit of individuals and non-profit institutions. The premiums are risk adjusted and they have the following annual rates based on insured deposits for different risk ratings; A: 0.45%, B: 0.60%, C: 0.95%, D: 1.25%, E: 1.45%. The coverage limit in 1991 was S 2500 and has been updated according to the wholesale price index on a quarterly basis. In December 1998 it was raised to S 62,000 and just a month earlier it was only at S 13,836. The limit was S 68,474 by the end of 2003. The coverage is calculated per depositor.
Sources: Authors' Survey of Deposit Insurers; IADI Survey: Peru (2003); Garcia (1999); Kyei (1995).

Philippines. (*Philippine Deposit Insurance Corporation-PDIC, Republic Act 3591/7800*) The scheme of Philippines was established in 1963. It is government legislated and administered and jointly funded. The government provided the initial capital. The central bank has made loans and borne losses. The government and the central bank are represented on the board. All deposit-taking institutions and corporations authorized to perform banking functions in the Philippines are covered and are obliged to be members of the Fund. The coverage is extended to savings and checking accounts; foreign currency, inter-bank and time deposits on a per depositor per institution basis. The coverage limits in Philippine pesos took the following values historically: 10,000 in 1963, 15,000 in 1978, 40,000 in 1984 and 100,000 since 1992.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); IADI Survey: Philippines (2003); Kyei (1995); Talley and Mas (1990).

Poland. (*Banking Guarantee Fund, Law on Banking Guarantee Fund, 1994*) The Polish deposit guarantee scheme was established in 1995. It is officially administered and jointly funded. The Bank of Poland and the government contributed the initial capital. It excludes the deposits of a bank's significant stockholders, directors, or senior managers, the deposits of the treasury, investment firms, or insurance companies. The treasury also insures some housing savings deposits. The coverage is calculated per depositor per institution. In 1995 the coverage limit was calculated as 100% of up to EUR 1,000 and 90% of EUR 1,000 to EUR 3,000. Then, the upper limit in euros (the co-insured part) rose over time as follows; 1997: 4,000, 1998: 5,000, 1999:8,000, 2000: 11,000, 2001: 15,000, 2002: 18,000, 2003: 22,500.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); Kyei (1995).

Portugal. (*Deposit Guarantee Fund, Decree-Law No. 298/92*) The scheme of Portugal was established in 1992 and was revised in 1995. It is officially administered and jointly funded. The Bank of Portugal provided the initial capital to the Fund. In 1999 the coverage for agricultural credit cooperatives has been changed to be equivalent to the coverage for commercial banks. The scheme extends coverage to demand, time and foreign currency deposits, but not to those of insiders or criminals, financial institutions or central and local governments. All credit institutions are mandatory members of the Fund and they pay annual premiums at rates ranging between 0.1% and 0.2%. Initially, the coverage limit was 100% of first ECU 15,000, 75% of second ECU 15,000, and 50% of third ECU 15,000. Since June 1999 the coverage limit is fixed at EUR 25,000 without co-insurance per depositor per institution.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); IADI Survey: Portugal (2002); Institute of International Bankers (1999), "Global Survey 1999"; Kyei (1995).

Romania. (*Deposit Guarantee Fund in the Banking System*) The Romanian scheme was established in 1996. It is government legislated and funded. The fund can borrow from the state, the central bank and other resources. The government can guarantee the debt. Coverage limit is adjusted annually for inflation and it was ROL 125,222,000 (approx. $3,841) by the end of 2003. The maximum coverage amount is calculated per depositor per institution and the goal is to attain the EU ceiling requirement of EUR 20,000. Each Romanian bank pays an initial contribution equivalent to the 1% of its subscribed capital of the domestic banks. Foreign bank branches pay an initial contribution equivalent to 1% of the subscribed bank capital of the minimum capital provided by a Romanian bank. Premium rates range between 0.3% and 0.6% of natural persons' deposits. They are calculated according to a formula that includes measures of solvency, profitability, liquidity, ratio of loans to equity, and risk exposure and can be 1.6% at maximum.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); IADI Survey: Romania (2002); Institute of International Bankers (1997), "Global Survey 1997".

Russia. (*Agency for Restructuring Credit Organizations-ARCO, Deposit Insurance Program, Federal Laws 177-FZ through 182-FZ*) The deposit insurance system of Russia was legislated in December 2003. The law only covers deposits of physical persons and hence excludes corporate and inter-bank deposits. The coverage limit in rubles was set at 100% of deposits up to 20,000; 90% of deposits between 2,000 and 25,000; 50% of deposits over 25,000; total coverage not to exceed 100,000. Currently, the limits are tied to minimal wage (MW) which is at 100 rubles. Thus, the figures above re-expressed in terms of MW become 100% of deposits up to 20 MWs; 90% of deposits between 20 MWs and 250 MWs; 50% of deposits over 250 MWs; total coverage not to exceed 1000 MWs. The law allows both ex-ante and ex-post funding. ARCO provided the initial capital of Rb 3 billion. The Deposit Insurance Agency is planned to be constructed and take over the administration. The premiums are planned to be no more than 0.15%, and in emergency up to 0.3% which will go down to formed 0.05% once the fund reaches 5% of the insured deposit base.
Sources: Agency for Restructuring Credit Organizations-Russia (2004), "Deposit Insurance Program"; OECD (2004), "OECD Economic Survey of the Russian Federation 2004: Russia's Deposit Insurance Law".

Serbia and Montenegro. (*Agency for Deposit Insurance and Bank Rehabilitation, Bankruptcy and Liquidation, Serbia; Deposit Protection Law, Montenegro*) The deposit insurance system of Serbia came into force in 2001. The coverage limit is set at 5,000 dinars per depositor per bank which extends to foreign currency deposits as well. On the other hand, Deposit Protection Law was adopted on July 11th, 2004 by Montenegro which provides protection up to EUR 5,000 per depositor per bank and the Fund can increase this amount up to EUR 20,000 depending on its resources and the amount of protected deposits.
Sources: Bank Rehabilitation Agency-Serbia (2004), http://www.bra.gov.yu/english/; Authors' Survey of Deposit Insurers.

Slovak Republic. (*Deposit Protection Act, No. 118/1996 to 340/2003*) The scheme of Slovak Republic was established in March 1996 and was revised in 2001 in accordance with the EU directive 94/19/EC. The system is jointly administered and funded. The central bank made an initial contribution and may make loans to the fund. Anonymous deposits and deposits of owners, directors and senior managers are not covered. The premium rates for building societies are half of those of commercial banks. Membership is mandatory and premium rates range between 0.1% and 0.3%. Until 2002, the coverage limit for deposits was thirty times the average monthly salary of previous year as published by the National Statistical Office, whereas the rate with savings banks was sixty-fold. In 2002, the bank deposit limit was raised to forty times the average monthly salary. Finally, in 2003 the coverage limit was set at 90% of inaccessible deposits not to exceed EUR 20,000.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999).

Slovenia. (*Deposit Guarantee System, Banking Act*) The deposit guarantee scheme of Slovenia was introduced in 2001. Between 1991 and the end of 2000 there was an explicit unlimited coverage by the government. The system is government legislated and administered. Funding is provided on an ex-post basis such that banks are not obliged to pay premiums but to invest a minimum 2.5% of the guaranteed deposits in the Bank of Slovenia bills. The membership to the scheme is mandatory for all deposit taking institutions. The coverage limit was SIT 4.2 million in 2001 which went up to SIT 5.1 million (about $ 27 thousand) in 2003. The coverage is calculated per depositor per institution and it is extended to foreign currency deposits as well.

Sources: Authors' Survey of Deposit Insurers; IADI Survey: Slovenia (2003).

Spain. (*Deposit Guarantee Fund, Royal Decree Law 4 & 18*) Spain has separate deposit guarantee funds for its commercial banks (established in 1977), savings banks (established in 1980), and credit cooperatives (established in 1982). The system is government legislated and privately administered. Each fund is jointly administered by their management commissions with eight members. Four members are from the Bank of Spain and the other four are from the member institutions. Deposits of financial institutions, public bodies, and insiders are not covered. Deposits in financial institutions from other EU countries are also covered. Membership to the Spanish scheme by branches of foreign banks – including the EU banks – is voluntary. The central bank can make limited loans to the Fund. The premiums are assessed annually with flat rate. In 2003 the rates were 0.6% for commercial banks, 0.4% for savings banks, and 1% for credit cooperatives. The coverage limits have taken the following values historically: 1977: 500,000 pesetas, 1980: 750,000 pesetas, 1981: 1.5 million pesetas, 1995: 15,000 ecus, 1996: 15,000 euros, 2000: 20,000 euros.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); IADI Survey: Spain (2003); Institute of International Bankers (1997), "Global Survey 1997"; Kyei (1995).

Sri Lanka. The scheme of Sri Lanka was established in 1987. It is officially administered and jointly funded. The central bank provided the initial capital and can advance funds. Membership to the scheme is voluntary. Deposits in foreign currencies are not covered. Deposits of the government, public corporations, and other banks are also excluded from coverage. The deposit coverage limit was set at Rs 100,000 in 1987 for private individuals only.
Source: Allrefer.com (2004), "Country Study and Guide: Sri Lanka", http://reference.allrefer.com/country-guide-study/sri-lanka; Garcia (1999).

Sweden. (*Deposit Guarantee Board*) The deposit insurance scheme of Sweden was established in January 1996 based on the EU directive. In 1992, Sweden introduced a temporary guarantee of all bank liabilities for that year. This temporary guarantee mechanism was abolished in July 1996. The new system is officially administered and jointly funded. The government has borne losses in the past. The scheme covers saving and checking accounts as well as foreign currency and inter-bank deposits of up to SEK 250,000 (approximately $34,300 as of 2003).
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); IADI Survey: Sweden (2003); Institute of International Bankers (1997), "Global Survey 1997".

Switzerland. (*Deposit Guarantee Scheme*) The deposit guarantee scheme in Switzerland was established in 1984. It is privately administered. The scheme is funded exclusively by the members. There is no permanent fund in place. Banks make ex-post contributions when needed. Membership to the scheme is voluntary. The coverage limit for savings deposits per depositor is currently at CHF 30,000 with no co-insurance.
Sources: Barth, Caprio, and Levine (2001); Garcia (1999); Kyei (1995).

Taiwan. (*Central Deposit Insurance Corporation-CDID, Deposit Insurance Act, Article 46, 1985*) The DIS of Taiwan was established in 1985. It is officially administered and jointly funded. Membership to the system is compulsory by all deposit-taking financial institutions and the premium rates based on three different levels of risk are 0.05% 0.055%, and 0.06%. Initially, the maximum coverage of the scheme was NT$ 700,000, which has been set at NT$ 1 million since August 1987. The coverage is calculated per depositor per institution. Apart from CDIC, Taiwan government established the Financial Restructuring Fund to provide blanket guarantees in handling the problem institutions between July 11th, 2001 and July 19th, 2004 with a provision for a one-year extension.
Sources: Authors' Survey of Deposit Insurers; IADI Survey: Taiwan (2003).

Tanzania. (*Deposit Insurance Board-DIB, Financial Institutions Act, 1991*) The deposit insurance system of Tanzania was established in 1991 and became operational in 1994. It is government legislated and administered. The government provided the initial capital. The fund can borrow from the central bank. All types of deposits including inter-bank and foreign currency ones are covered up to TZS 250,000 without any co-insurance. Membership to the Fund is compulsory

Sources: Garcia (1999); IADI Survey: Tanzania (2003).

Thailand. Thailand has been offering a full blanket guarantee on all deposits since 1997, the aftermath of the financial crisis. A scheme is planned to be introduced.
Source: Garcia (2000).

Trinidad & Tobago. (*Deposit Insurance Corporation, Financial Institutions Act 1986*) The deposit insurance scheme of Trinidad & Tobago was established in 1986. It is government legislated, officially administered and jointly funded. The fund can borrow from the central bank. The covered deposit types are demand, savings, and time deposits but not inter-bank and foreign currency deposits. The coverage limit per depositor is TT$ 50,000 which was worth US$ 14,000 at inception and was worth only US$ 7,930 as of 2003 due to devaluation over time.
Sources: Garcia (2000); IADI Survey: Trinidad and Tobago (2003).

Turkey. (*Saving Deposit Insurance Fund, Decree Law No. 70*) The fund in Turkey was established in 1983. Until August 2000 it was administered by the Central Bank and then the administration was transferred to the Banking Regulation and Supervision Agency (BRSA) which is financially and administratively autonomous from the government. It is jointly funded; however, the Fund had to be supported by the government especially after major crises in 1994 and 2000. Initially coverage was extended to deposits and CDs in Turkish Liras, and foreign currency denominated savings accounts of real persons domiciled in Turkey. Currently, deposits, by natural persons that are native or of foreign origin, in the forms of domestic currency, gold, and foreign currency are insured. The coverage limits have changed several times over time: Between October 1986 and March 1992 the coverage was 100% of TL 3 millions and 60% of the next TL 3 millions; between March 1992 and April 1994 the coverage was 100% of TL 25 millions and 60% of the next TL 25 millions; between April 1994 and May 1994 the coverage was TL 150 millions without co-insurance. In the wake of the crises in 1994, all deposits have been brought under coverage between May 1994 and June 2000. Between June 2000 and December 2000 the coverage was TL 100 billions which then reduced to TL 50 billions in January 2001 just to be replaced by another blanket guarantee between July 2003 and July 2004. Since then coverage limit remained at TL 50 billions.
Sources: Central Bank of Turkey (1983), "Law on Deposit Insurance Fund," unofficial translation; Authors' Survey of Deposit Insurers; IADI Survey: Turkey (2003).

Turkmenistan. In 2000 Turkmenistan introduced a full guarantee on deposits including those denominated in foreign-currency. It is officially administered and has a compulsory membership policy.
Source: Barth, Caprio and Levine (2001).

Uganda. (*Deposit Insurance Fund, Financial Institutions Act, 1993*) The fund in Uganda was established in 1994. It is officially administered by the Bank of Uganda and jointly funded. Membership is mandatory for all banks and credit institutions and they are required to pay a 0.2% flat rate assessed annually on weighted deposit liabilities. The coverage is U Sh 3 millions per depositor per institution. Foreign currency and inter-bank deposits are not covered.
Sources: Bank of Uganda (2004), "In the Matter of the Financial Institutions Statute 1993"; IADI Survey: Uganda (2002).

Ukraine. (*Fund for the Guarantee of Deposits of Natural Persons, Decree 996/*98) The deposit guarantee scheme of Ukraine was established in September 1998. It is officially administered and jointly funded. The initial capital of UAH 20 million was provided by the National Bank of Ukraine and will lend when necessary. Deposits of insiders and their families, as well as inter-bank deposits are excluded. The coverage limit was initially set at UAH 1,200, which was raised to UAH 1,500 in 2003.
Source: Garcia (1999); IADI Member Profiles: Deposit Guarantee Fund-Ukraine.

United Kingdom. *(Deposit Protection Fund, Banking Act of 1979 and 1987; Financial Services Compensation Scheme)* The fund in the UK was established in 1982. The system is government legislated and privately administered and funded. The central bank made loans in the past but there is now no public funding for the DIS. There is no permanent fund in place and membership is mandatory. Banks make ex-post contributions when needed. Deposits of financial institutions are not covered by the system. The coverage limits have evolved as follows over time: in 1982 compensation limit was 75% of first £10,000 which was raised to 75% of £20,000 in May 1987. In July 1995, the Scheme was amended by the Credit Institutions Regulations and maximum payment was changed to 90% of £20,000 or EUR 20,000, whichever is higher. The Financial Services Compensation Scheme came into existence in December 2001 and the scheme changed the coverage to 100% of the first £2,000 and 90% of the next £33,000. Currently, deposits in all currencies are covered on a per depositor per institution basis.
Sources: Authors' Survey of Deposit Insurers; Garcia (1999); IADI Survey: UK (2003); Kyei (1995).

United States. *(Federal Deposit Insurance Corporation-FDIC, Federal Reserve Act)* The US deposit insurance system was established in 1934 in response to the Great Depression. It is government legislated and administered and jointly funded. The government provided initial capital, borne losses of the savings & loan associations in the past. Membership is compulsory for nationally chartered and for almost all state-chartered banks and thrifts. Premiums are risk-adjusted and can range all the way from 0% to 0.27%. Deposits booked off-shore are not covered. Initially the coverage limit was set at $5,000. The coverage limit has been increased several times as follows: $10,000 in 1950, $15,000 in 1966, $20,000 in 1969, $40,000 in 1974, and finally $100,000 in 1980.
Sources: Federal Deposit Insurance Corporation (1996),"Annual Report"; Garcia (1999); IADI Survey: USA (2003); Kyei (1995).

Uruguay. (*Bank Deposits Collateral Fund, Superintendency of Bank Savings Protection*) Law on protection of bank deposits was enacted on December 27th, 2002 creating a Bank Deposits Collateral Fund and a Superintendency of Bank Savings Protection. However, although Uruguay has established a deposit insurance system, it is not yet regulated. The Financial System Restructuring Act in Uruguay authorizes the executive branch to set aside part of its resources to cover deposits up to US$ 100,000.
Sources: Central Bank of Uruguay (2002), "Law No. 17.613", December 27; Inter-American Development Bank (2005), "Designing Deposit Insurance," in: IPES 2005: Unlocking Credit: The Quest for Deep and Stable Bank Lending, Chapter 7, Washington, DC: Inter-American Development Bank.

Venezuela. (*Guarantee Fund of Deposits and Banking Protection-FOGADE, BANAP, Charter of Deposit Guarantee and Bank Protection Fund*) The fund in Venezuela was established in 1985. It is officially administered and jointly funded. Central bank and government have borne losses and have refinanced the DIS in the past. The board has seven members of which four are from the government, one from the banks, one from the labor union, and one from the insurance agency's employees. In 1994 the premiums were raised from 0.5% to 2.0% due to a substantial assistance to troubled banks. The Fund has selectively made payments over the legally stated limits. Inter-bank and foreign currency deposits are not covered. The coverage limit since 2002 is Bs 10 millions, which was Bs 250,000 in 1985, Bs 1 mil in 1994, and Bs 4 mil in 1995.
Sources: Guarantee Fund of Deposits and Banking Protection FOGADE (2004), Venezuela, http://www.fogade.gov.ve; Garcia (1999); Kyei (1995).

Vietnam. (*Deposit Insurance of Vietnam*) Deposit Insurance of Vietnam was created in July 2000. It is government legislated and administered. The maximum coverage has been VND 30 millions which is calculated per depositor per institution.
Source: Authors' Survey of Deposit Insurers.

Zimbabwe. The deposit insurance system of Zimbabwe was created in July 2003. The coverage limit was Zimbabwe $ 200,000 as of 2003. There is no co-insurance and coverage is calculated per depositor per institution. It is jointly administered.
Source: Barth, Caprio and Levine (2001); Authors' Survey of Deposit Insurers.